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Hoylelake, Neston and Wirral



REPORT
OF
The Medical Officer of Health
J. HATTON, M.D., D.P.H.

For the Year 1946

Report of Medical Officer of Health for 1946

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NESTON.

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INTRODUCTION.

Some annual reports can record few features of outstanding interest and are given therefore to reporting matters of an ordinary or routine nature. Not so in this case.

The year 1946 is a notable one because it marks the end of the first hundred years of public health administration, which has sought to promote and safeguard the health of the whole community, and it is remarkable besides for the enactment of the National Health Service Act, which received the Royal Assent in November. The year undoubtedly marks an epoch in the history of medicine in this country, and the National Health Service Act, 1946, is a milestone equal in importance to the Public Health Act, 1848, and the Public Health Act, 1875. We can often derive much encouragement from past events, and it is fitting that we should discuss in retrospect the progress which we have made since the public consciousness was roused to the need for health and social reform about the middle of the nineteenth century.

In the first half of the nineteenth century England was in the throes of the industrial revolution, and the pre-occupation in those times was the struggle for trade and commercial supremacy. Long hours of labour were common enough, and child labour was exploited. Physical suffering and privation due to bad housing, poverty and bad social conditions was the lot of many. Public opinion was backward in such matters as health and social improvement. Sanitary control was of the most casual and primitive order, and death rates and sickness rates were very high. Cholera invaded the country in 1831 and resulted in some 50,000 deaths, and typhus fever and smallpox were rampant. This is not surprising, since water supplies, drainage, sewage and refuse disposal were either non-existent or unsatisfactory.

It was not long before the social reformers appeared on the scene. These philanthropic and public-minded persons, striving individually or as members of voluntary institutions, were sustained very often by their personal enthusiasm only. Nevertheless they forged the framework of the legislation and reforms which have brought such important changes to the social structure of the country, and the debt which we owe to them will never be fully recognised. Edwin Chadwick was one of these pioneers, and he was one of the first to realise the association between ill-health and bad sanitary and en-

viromental conditions. He was the author of a report on the Poor Law in 1834, and as a Commissioner he investigated the sanitary conditions of the country at large. He contributed much to the early public health legislation, and to the Public Health Act of 1848.

The Public Health Act, 1848, conferred powers upon Local Authorities, but there was little in the way of compulsion, and in spite of this and other Acts favourable to sanitary and social reform progress was slow. It was later in the 1870's, with the advent of the Local Government Board and the election of more representative Local Bodies, that improvement on a noticeable scale began. It was only towards the end of the century that really substantial progress could be claimed, and by 1860 it is true to say that cholera had been eliminated, typhus fever much reduced, smallpox controlled, enteric fever reduced, and while the death and sickness rates were falling rapidly, the standard of living of the community was rising steadily.

During the period outlined above practically all the efforts to raise the standard of the public health were directed towards improving the environment of the individual, towards better sanitation and housing, pure water supplies and so on. Gradually as these were improved they began to be accepted as a matter of course, and the emphasis then shifted from the control of the environment to the care of personal health. This personal conception of the health services emerged with the turn of the century. The problems involved in dealing with the person or individual are much more complex than those which are associated with the material environment. Yet the progress which can be claimed as a result of environmental improvements has continued during the second or personal phase of public health work, and so with the changes in the character of the work, the terminology describing it has changed. First sanitation, then public health, later preventive medicine, and lastly social medicine.

The second, or personal, phase, may be said to have its commencement with the Midwives Act of 1902. This was followed by an imposing array of legislation, with a scope unimaginable to those who worked fifty years before. It covered the school medical service, the tuberculosis service, the care of the mentally defective, the treatment of venereal disease, to mention only the most important. The publicly

owned hospitals, meanwhile, had been administered by the Poor Law Authorities, excepting, of course, those for the treatment of infectious conditions, but in 1929 the Local Government Act transferred them to the larger local authorities, and in this way local authorities became responsible for the cure of illness as well as for the prevention of it. The second phase is considered by most authorities to have ended with the passing of the National Health Service Act, 1946, concurrently with the centenary of public health in this country.

What has been accomplished during the two phases of public health administration extending over a hundred years? The answer is to be found in the statistics printed below, which are some of those quoted recently by Sir Allan Daley the Medical Officer of Health of the London County Council. The year 1847 is the first year for which a detailed classification of vital statistics is available, and this year is therefore compared with 1945.

England and Wales.

	1847	1945
Population	17,150,018	42,636,000
Birth Rate	31.5	16.1
Death Rate	24.7	11.4
Infant Mortality Rate	164.0	47.0
Maternal Mortality Rate	4.52	1.84
Diarrhoea under 2 years—Rate	15.4	5.5

Deaths from:

Smallpox	4,227	—
Typhus	30,320	—
Cholera	788	—
Diphtheria	3,338	694
Scarlet fever	14,697	82
Whooping cough	9,260	689
Measles	8,690	728
Tuberculosis	67,964	23,464

These figures show the advances which have been made in a hundred years. They summarise a record of achievement which deserve high commendation.

Now to the future, the next phase, which will be influenced materially by the provisions of the National Health Service Act, 1946. This Act will make great changes. The hospitals will be placed on a regional basis and transferred to the Ministry of Health. The hospital service will be responsible for institutional midwifery, tuberculosis, infectious disease and venereal disease. The larger local authorities, the county councils and the county borough councils, which administer any of these services at the present time, will lose them, and as newly constituted Local Health Authorities, they will be responsible for Health Centres, the care of mothers and children, midwifery, health visiting, vaccination, immunisation, ambulances and other services. These authorities are also responsible for the School Medical Services under the Education Act, 1944. These changes will not influence the position of the Urban District Councils, which will presumably continue as the Local Sanitary Authority with their responsibilities for environmental hygiene as at present. The future of the Medical Officers of the Urban District Councils is still a matter for speculation, but it is obvious that they cannot remain outside the scope of the new Act, and thus as a result of it many who are independent will become subordinate to some extent to the County Councils.

The detailed administration of the Act will be governed to a considerable extent by Regulations which will be made by the Minister of Health, and as none of these have been issued there is consequently some uncertainty. Whatever the nature of the administrative structure, it will find many problems still awaiting solution. The objective of the future in broad outline will differ little from that of the past, and may be summarised as the maintenance of the health of the community, the development of the highest standard of physical and mental welfare, the improvement of the environment and the encouragement of an outlook in the citizen favourable to all these.

Shall we face the future with doubt or with optimism? If we reflect on the achievements of the past and consider the opportunities of the future, we have good reason for optimism. The accumulated experience of past years offers encouragement for the future. We have great traditions in preventive medicine in this country, and we may confidently expect new advances which will enrich medical science and further the welfare of the people.

Dr. J. B. Yeoman retired from his post of Medical Officer of Health of the North-West Cheshire Combined Districts in September, 1939. In 1942 he volunteered to leave his retirement and to resume for the time being his former work in the Urban Districts of Hoylake, Neston and Wirral. Dr Yeoman has now retired for the second time. He became the Medical Officer of Health in 1911. He has therefore served the area and its Councils for over 32 years, and during this period he has laboured unremittingly to improve the standard of life and health in this county.

Dr. Yeoman retires with the good wishes of all his colleagues and with the good wishes of the members of his Councils who, as he himself expressed it, invariably accepted his advice.

HOYLAKE URBAN DISTRICT.

The Urban District was constituted in 1889 ; and on 1st April, 1933, the Parishes of Caldby, Frankby, Greasby, Grange and part of Saughall Massie were added.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (acres)	5,933
Registrar-General's estimate of resident population (mid-1946)	26,080
Number of inhabited houses	7,479
Rateable Value	£278,738
Sum represented by a penny rate	£1,130

The area is residential and agricultural. Fishing is still pursued by Hoylake men, and other occupations are laundry and domestic work, wood-working and printing.

The natural increase of a population is the excess of births over deaths. The following table shows the condition 1939—1946 in Hoylake :—

Year	Population	Natural Increase per 1,000 of Population.	
1939	23,400	4 more deaths than births	—0.2
1940	26,290	15 more deaths than births	—0.6
1941	28,580	63 more deaths than births	—2.2
1942	28,080	77 more births than deaths	+2.7
1943	26,340	25 more births than deaths	+0.9
1944	25,100	107 more births than deaths	+4.3
1945	24,770	10 more births than deaths	+0.4
1946	26,080	51 more births than deaths	+1.9

Extracts from vital statistics for the year 1946.

These statistics are calculated on a population of 26,080, the estimate furnished by the Registrar-General.

Live Births.					Total	Males	Females
Legitimate	.....	.....	.....	.....	381	204	177
Illegitimate	.....	.....	.....	.....	17	12	5
Totals	.....	.....	.....	.....	398	216	182

Birth Rate per 1,000 estimated resident population	.....	.....	.....	.....	.....	.....	15.3
Birth Rate for England and Wales	.....	.....	.....	.....	.....	.....	19.1
Birth Rate in 148 Smaller Towns, England and Wales, (population 25,000—50,000)	.....	.....	.....	.....	.....	.....	21.3

Stillbirths.					Total	Males	Females
Legitimate	.....	.....	.....	.....	11	7	4
Illegitimate	.....	.....	.....	.....	—	—	—
Totals	.....	.....	.....	.....	11	7	4

Rate per 1,000 total (live and still) births	.....	.....	.....	.....	.....	.....	26.9
Rate per 1,000 total (live and still) births for England and Wales	.....	.....	.....	.....	.....	.....	27.1

Deaths.					Total	Males	Females
					347	167	180
Death Rate per 1,000 of estimated resident population	.....	.....	.....	.....	.....	.....	13.3
Death Rate for England and Wales	.....	.....	.....	.....	.....	.....	11.5
Death Rate for 148 Smaller Towns, England and Wales (population 25,000—50,000)	.....	.....	.....	.....	.....	.....	11.7

The Registrar-General has not supplied a Comparability Factor since 1940, because the variety and magnitude of local population movements and the uneven incidence of civilian war deaths have together combined to frustrate the attempt to secure comparability between local death rates by the use of Areal Comparability Factors and the preparation and issue of such factors have been suspended for the present.

The absence of a Comparability Factor precludes a comparison between the former two rates.

Deaths from Puerperal Causes.

	Deaths	Rate per 1,000 total (live and still) births.
Puerperal and post abortive sepsis	Nil.	—
Other maternal causes	Nil.	—

Death Rate of Infants under 1 year of age :—

	Total	Males	Females
Legitimate	15	13	2
Illegitimate	1	1	—
Totals	16	14	2

All infants per 1,000 live births	40.2
Legitimate infants per 1,000 legitimate live births	39.4
Illegitimate infants per 1,000 illegitimate live births	58.8
Infant Mortality Rate for England and Wales	43.0
Infant Mortality Rate for 148 Smaller Towns, England and Wales (population 25,000—50,000)	37.0

Deaths from Cancer (all ages)	61
Deaths from Measles (all ages)	N i
Deaths from Whooping Cough (all ages)	Nil.
Deaths from Diarrhoea (under 2 years)	2

Number of Deaths during Years 1939—1946.

Year	Number	Rate per 1,000 per annum.
1939	320	13.1
1940	336	12.8
1941	388	13.6
1942	318	11.3
1943	367	13.9
1944	324	12.9
1945	323	13.0
1946	347	13.3

Deaths at Various Ages During 1946.

Age	Number of Deaths
Under 1 year	16
1 year and under 2	1
2 years and under 5	1
5 years and under 15	4
15 years and under 25	2
25 years and under 35	4
35 years and under 45	8
45 years and under 55	23
55 years and under 65	54
65 years and under 75	93
75 years and under 85	101
85 years and over	39
Age unknown	1
Total	347

Table of Infantile Mortality, 1939—1946.

Death rate of infants under 1 year of age (per 1,000 live births) :—

Year	Hoylake	England & Wales
1939	25.2	50
1940	24.7	55
1941	48.1	59
1942	35.4	49
1943	38.3	49
1944	25.5	46
1945	30.0	46
1946	40.2	43

The Infant Mortality Rate in the 148 Smaller Towns was 37 in 1946.

Infantile Deaths.

The causes of death of children under the age of one year are shown below.

Cause of Death	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	4 weeks and under 3 months	3—6 months	6—9 months	9—12 months	Total deaths under 1 year.
Premature Birth	2	—	—	—	1	—	—	—	3
Congenital Malformation, Birth Injuries & Infantile Diseases	4	—	—	—	4	—	1	—	9
Heart Disease	1	1	—	—	—	—	—	—	2
Dysentery	—	—	—	—	—	1	—	—	1
Accidental Death	—	—	—	—	1	—	—	1	1
Total	7	1	—	—	6	1	1	—	16

Causes of Death.

The table below was compiled from figures supplied by the Registrar-General, and the classification is given according to the cause of death.

Causes of Death	Males	Females	Total
1. Typhoid and paratyphoid fevers	—	—	—
2. Cerebro spinal fever	—	—	—
3. Scarlet fever	—	—	—
4. Whooping cough	—	—	—
5. Diphtheria	—	—	—
6. Tuberculosis of respiratory system	7	2	9
7. Other forms of tuberculosis	1	3	4
8. Syphilitic diseases	—	—	—
9. Influenza	1	2	3
10. Measles	—	—	—
11. Acute polio-myelitis and polio-encephalitis	—	—	—
12. Acute infectious encephalitis	—	1	1
13. Cancer of buccal cavity and oesophagus (M) uterus (F)	1	—	1
14. Cancer of stomach and duodenum	6	4	10
15. Cancer of breast	—	9	9
16. Cancer of all other sites	23	18	41
17. Diabetes	—	1	1
18. Intracranial vascular lesions	12	26	38
19. Heart disease	41	55	96
20. Other diseases of circulatory system	6	10	16
21. Bronchitis	9	1	10
22. Pneumonia	6	7	13
23. Other respiratory diseases	—	1	1
24. Ulcer of stomach or duodenum	6	1	7
25. Diarrhoea under 2 years	1	1	2
26. Appendicitis	—	—	—
27. Other digestive diseases	3	6	9
28. Nephritis	8	6	14
29. Puerperal and post-abortive sepsis	—	—	—
30. Other maternal causes	—	—	—
31. Premature birth	2	1	3
32. Congenital malformation, birth injuries, infantile diseases	8	1	9
33. Suicide	1	2	3
34. Road traffic accidents	2	—	2
35. Other violent causes	7	5	12
36. All other causes	16	17	33
TOTALS	167	180	347

SUMMARY OF VITAL STATISTICS FOR 1946 AND PREVIOUS YEARS.

Year	Population Estimated Mid-Year	LIVE BIRTHS			DEATHS											
		Number	Rate	Rate England & Wales	Total Number Registered in District	Transferable		Under 1 year of age			At all ages					
						Of Non-Residents Registered in District	Of Residents Not Registered in District	Number	Rate per 1,000 Live Births	Rate England & Wales	Number	Rate	Standard Rate for Comparison with England & Wales	Rate England & Wales		
1939	23,400	316	13.5	15.0	267	13	66	8	25.2	50	320	13.1	12.1	12.1	12.1	Natural Increase (Excess of Births over Deaths)
1940	26,290	321	12.2	14.6	298	37	75	8	24.7	55	336	12.8	10.9		14.3	—15
1941	28,580	325	11.0	14.2	343	52	97	16	48.1	59	388	13.6			12.9	—63
1942	28,080	395	14.0	15.8	262	33	89	14	35.4	49	318	11.3			11.6	+77
1943	26,340	392	14.8	16.5	302	44	109	15	38.3	49	367	13.9			12.1	+25
1944	25,100	431	17.2	17.6	268	27	83	11	25.5	46	324	12.9			11.6	+107
1945	24,770	333	13.4	16.1	280	37	80	10	30.0	46	323	13.0			11.4	+10
1946	26,080	398	15.3	19.1	283	38	102	16	40.2	43	347	13.3			11.5	+51

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

Public Health Officers.

Details are given on page 2.

Laboratory Facilities.

A private laboratory is employed for the routine examination of clinical material and for the investigation of disease.

Food and Drugs throughout the District are submitted for analysis to the Cheshire County Laboratory. The samples are taken by County Officers.

Water supplies and swimming baths are investigated for the Council by the Counties Public Health Laboratories and the University of Liverpool.

The Municipal Laboratories at Birkenhead are employed for the examination of milk and ice cream samples.

Ambulance Facilities.

The Council have made an arrangement with the Wirral Urban District Council for a joint service to cover the area which is administered by both Authorities. A modern Armstrong Siddeley ambulance has been provided by the Wirral Urban District Council and a further new ambulance was ordered by the Hoylake Urban District Council in April, 1946. The Civil Defence vehicle which was formerly in service in Hoylake is now used for mortuary purposes.

The service is operated from Broomfield, Meols Drive, Hoylake, and an accident and sickness removal service is maintained as far as is possible with the limited equipment now available.

The ambulance calls for the year were as follows:—

Illness	Accidents	Maternity	Deaths
293	42	13	20

The authorities at the County General Hospital, Clatterbridge, undertake the transport of accident, sick and maternity cases to the Hospital.

The Wirral Joint Hospital Board are responsible for the removal of infectious cases.

The ambulances of the Merseyside Hospitals Council are available for the service of subscribers in this area.

Nursing in the Home.

This Service is undertaken by the Hoylake and West Kirby District Nursing Association, which provides trained nurses for work about the district. Subscriptions from charitable persons and small charges for services rendered serve to support the organisation. The work of the Association is much appreciated by residents of the district.

Treatment Centres and Clinics.

The Council's Diphtheria Immunisation Clinic is conducted at 8, Market Street, Hoylake, on the first Friday of each month at 3-15 p.m.

The following Clinics are also provided by the Cheshire County Council :—

Maternity and Child Welfare.	Each Month.	Time.
Hoylake—8, Market Street.	Every Thursday.	1-30 p.m.

Child Welfare.

Greasby—Wesleyan School	Alternate	
Room	..... Wednesdays.	2-15 p.m.

School Clinic.

Hoylake—8, Market Street.	Daily (except Sat. & Sun.)	9-0 a.m. to 10-0 a.m.
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(School Medical Officer attends every Friday at 10 a.m.)

Dental Clinic.	Each Month.	Time.
Hoylake—8, Market Street.	Arranged as required.	
Eye Clinic.		
Hoylake—8, Market Street.	2nd Monday, when required.	1-0 p.m.
Orthopaedic Clinic.		
Hoylake—8, Market Street.	Last Friday.	2-0 p.m.
Massage Clinic.		
Hoylake—8, Market Street.	Wednesday	1-30 p.m. to 4-0 p.m.
Tuberculosis Dispensary.		
42, Hamilton Square, Birkenhead.	Every Tuesday and Friday.	2-0 p.m.
Venereal Diseases.	Males.	
Birkenhead General Hospital.	Monday, Wednesday and Friday.	5-30 p.m. to 7-0 p.m.
	Females.	
	Tuesday.	5-30 p.m. to 7-0 p.m.
	Wednesday and Friday.	2-0 p.m. to 4-0 p.m.

Hospitals.

Voluntary.

The Hoylake and West Kirby Cottage Hospital provides accommodation for 36 patients. It is staffed by the Practitioners of the District and by visiting Consultants. It is equipped for major surgical work and has a new X-ray Department. The Ministry of Health Hospital Survey of the Hospital Services of the North West Area mentions this hospital in very favourable terms.

The Children's Convalescent Home, West Kirby, provides a number of beds for the emergency treatment of sick children from this locality. This institution has excellent equipment and is staffed by visiting Practitioners and Consultants.

The day nursery at the Babies' Hospital and Nurseries, Hoylake has been of great benefit to mothers of the District.

The Voluntary Hospitals in Liverpool and Birkenhead admit patients from this District.

Public.

Isolation Hospital. The Hoylake Urban District Council is one of the Constituent Authorities of the Wirral Joint Hospital Board. The Board's Isolation Hospital at Clatterbridge has accommodation for 100 patients. The Hospital has modern cubicle wards and a new nurses' home was constructed in 1937. Infectious patients from this area are treated in the hospital where necessary, and under certain conditions beds may be available for measles and whooping cough cases. At Pensby there is a hospital with 12 beds for convalescent scarlet fever patients.

Smallpox Hospital. The Wirral Joint Hospital Board have an arrangement with the Liverpool Port Health Authority for the admission of smallpox patients to the Smallpox Hospital at New Ferry.

General. The County General Hospital at Clatterbridge has been extended and modernised during recent years, and now offers comprehensive services for the investigation and treatment of sickness to residents of this District. The Hospital contains 430 beds, including 34 beds in the Maternity Block, and the hospital has a large staff of resident practitioners and visiting consultants.

Mortuaries.

The Public Mortuary which is owned by the Urban District Council is situated in Carr Lane, Hoylake. Certain improvements which might serve the convenience of those responsible for conducting post mortem examinations need consideration, but these must necessarily be deferred for the present.

Legislation in Force.

The following is a list of the Local Acts of Parliament, Provisional and other Orders, and Adoptive Acts in force in the District :—

Private Acts.

- | | | | |
|----|---|-------|------|
| 1. | Hoylake and West Kirby Improvement Act, 1897 | ..... | 1897 |
| 2. | Hoylake and West Kirby Improvement Act, 1900 | ..... | 1900 |
| 3. | Hoylake and West Kirby Urban District Council Act, 1925 | | 1925 |
| 4. | Hoylake Urban District Council Act, 1935 | ..... | 1935 |

Provisional Orders.

- | | | | |
|----|--|-------|------|
| 1. | Hoylake and West Kirby Electric Lighting Order, 1897 | | 1897 |
| 2. | Hoylake and West Kirby Order, 1906 | ..... | 1906 |

Adoptive Acts.

1. Public Health Acts Amendment Act, 1890, Parts II. to V.
2. Infectious Disease (Prevention) Act, 1890.
3. The Private Street Works Act, 1892.
4. Small Dwellings Acquisition Acts, 1899-1923.
5. Public Health Acts Amendment Act, 1907. Powers under the following Sections :—
 - Part 2. Sections 18, 19, 20, 21, 22, 28, 29, 30 and 33.
 - Part 6. Sections 76 and 77.
 - Part 7. Sections 79, 81 and 85.
 - Part 9. The whole of
 - Part 10. Section 95.
6. Health Resorts and Watering Places Acts, 1921.
7. The Public Health Act, 1925.

Orders of the County Council.

7th November, 1889—Constitution of the Urban District.

3rd December, 1914—Dividing the Hoylake and West Kirby Urban Sanitary District into four wards. Altering the boundaries between the Urban District and the Wirral Rural District.

County of Chester Review Order, 1933, extension of District.

Council Bye-laws.

	Dates of Adoption.
1. Bathing	1899
2. Seashore	1899
3. Horses, Ponies, Mules or Asses	1900
4. Prevention of Nuisances	1901
5. West Kirby Park	1902
6. Fire Brigade	1911
7. Grange Hill Recreation Ground	1914
8. Pleasure Boats and Vessels	1923
9. Slaughterhouses	1924
10. Steam Organ, etc.	1925
11. Meols Parade, North Parade and South Parade (Sale and Hawking).	1927
12. Wireless Installations.	1928
13. Cemetery Regulations, Fees, etc.	1929
14. Driving Motor Vehicles on the Seashore	1930
15. Foreshores	1931
16. Hackney Carriages.	1931
17. New Streets and Buildings.	1936
18. Newton Common.	1936
19. Advertisements.	1937
20. Building.	1939
21. Camping Grounds.	1944

SANITARY CIRCUMSTANCES OF THE AREA.

Water.

The water supply of the area and of its several parts has been satisfactory both in quality and quantity.

The District receives its supply partly from the Council's own Waterworks and partly from the West Cheshire Water Board. The sources of supply are deep wells at Grange and Newton in the former case, and from Prenton, Hooton and Mouldsworth in the latter. In both cases the supplies are controlled by quarterly chemical and bacteriological examinations. All supplies are chlorinated, and samples of raw water and of water going into supply after treatment have been examined. All those investigated during the year have proved satisfactory. None of the waters supplied in the area have a plumbo solvent action, and the analysts' reports have revealed no evidence of contamination in any form.

The Council's supplies have a hardness of 20.0 and 28.5, expressed in parts per 100,000, at the Newton and Grange Works respectively, and 16.5 at the Town Main. Softening of the Council's supply was re-introduced to some extent during 1946. Softening of the West Cheshire Water Supply is carried out to the extent indicated below :—

Source	Hardness Parts per 100,000	Hardness after Softening Parts per 100,000
Hooton	24.5	15.0
Mouldsworth	32.0	25.5
Prenton	24.5	Not softened.

With the exception of seven houses on Hilbre Island public main supplies are in use throughout the area for drinking and domestic and trade purposes. Particulars of the number of dwelling-houses and of the population supplied from public water mains (a) direct to the house, (b) by means of standpipes are given below :—

Dwelling Houses				Population
(a)	House direct	.....	.....	26,010
(b)	Standpipes	.....	.....	70

Consumption.

The total volume of water pumped from the Council's Waterworks during 1946 was 380,000,000 gallons, representing a consumption of 50 gallons per head per day. This figure includes water used for trade purposes.

The details of the volume supplied to consumers in this area by the West Cheshire Water Board are not available, but it is estimated that consumption was in the order of 30 gallons per head per day.

The following are copies of reports on chemical and bacteriological examinations of the supplies :—

Analyst's Report.

WEST CHESHIRE WATER BOARD.

Hooton Pumping Station.

4th April, 1946.

Analysis of sample of water received on 27th March, 1946, from West Cheshire Water Board, labelled Hooton Pumping Station—flamed tap in softening house. Filtered, softened and chlorinated.

Taken by C. Hardman. Witness T. T. Lunt. Date 26/3/46. 1-45 p.m.

Chemical Results in parts per 100,000.

Appearance	Clear and bright.		
Colour	Normal.	Odour	Nil.
Reaction pH	Neutral : 7.3.	Free Carbonic Acid	1.7
Electric Conductivity		Alkalinity as Calcium	
at 20°C	680	Carbonate	23.5
Total Solids, 180° C	45.5		
Chlorine in Chlorides	9.0		
Nitrogen in Nitrates	0.04	Nitrites—Less than	0.001
Hardness : Permanent	0.0		
Temporary	15.0		
Total	15.0		
Metals	Absent.		
Free Ammonia	0.0016	Ammoniacal Nitrogen	--
Albuminoid Ammonia	0.0000	Albuminoid Nitrogen	—
Oxygen absorbed in		Free chlorine reaction	
4 hours at 27°C	0.0000	absent.	

Bacteriological Results.

(Bacteriological sample dechlorinated on collection).

No. of Bacteria per c.c. or ml.

On Agar in 3 days at 20°C. 1

1 day at 37°C. 1

2 days at 37°C. 1

The Bacillus Coli Present in — Absent in 100 c.c.

Bacillus Welchii Present in — Absent in 100 c.c.

(B. Enteritidis Sporogenes)

Report :—This sample is clear and bright in appearance, neutral in reaction and free from iron and other metals. The water is moderately hard in character, contains no excess of salinity or mineral constituents in solution and is of the highest standard of organic and bacterial purity. These results are normal, very satisfactory and consistent with a pure and wholesome water suitable for public supply purposes.

(Signed) GORDON MILES, B.Sc., F.R.I.C.

Analyst's Report.

WEST CHESHIRE WATER BOARD.

Mouldsworth Pumping Station.

4th April, 1946.

Analysis of a sample of Water received on 27th March, 1946 from West Cheshire Water Board, labelled Mouldsworth Pumping Station—flamed tap in softening house. Raw water—before chlorination.

Taken by C. Hardman. Witness S. Crawford. Date 26/3/46. 12-15 p.m.

Chemical Results in parts per 100,000.

Appearance	Clear and bright.		
Colour	Normal.	Odour	Nil.
Reaction pH.	Neutral : 7.5	Free Carbonic Acid	0.9.
Electric Conductivity		Alkalinity as Calcium	
at 20°C.	1280	Carbonate	19.5
Total Solids, 180°C.	85.0		
Chlorine in Chlorides	31.0		
Nitrogen in Nitrates	0.14	Nitrites	Absent
Hardness : Permanent	14.5		
Temporary	17.5		
Total	32.0		
Metals	Iron 0.010	other metals absent.	
Free Ammonia	0.0008	Ammoniacal Nitrogen	—
Albuminoid Ammonia	0.0000	Albuminoid Nitrogen	—
Oxygen absorbed in			
4 hours at 27°C.	0.005		

Bacteriological Results.

No. of Bacteria per c.c. or ml.		
On Agar in 3 days at 20°C.	.....o	
1 day at 37°C.	.....o	
2 days at 37°C.	.....o	
The Bacillus Coli	.....Present in —	Absent in 100 c.c.
Bacillus Welchii	.....Present in —	Absent in 100 c.c.
(B. Enteritidis Sporogenes)		

Report :—This sample is clear and bright in appearance, neutral in reaction and free from metals apart from a minute trace of iron. The water is very hard in character but not excessively so, and it is normal with respect to its salinity and content of mineral constituents in solution. It is of the highest standard of organic and bacterial purity. It is, therefore, a satisfactory sample of raw water, pure and wholesome in quality and suitable for public supply purposes.

(Signed) GORDON MILES, B.Sc., F.R.I.C.

Analyst's Report.**WEST CHESHIRE WATER BOARD.****Prenton Pumping Station.**

4th April, 1946.

Analysis of a sample of Water received on 27th March, 1946, from West Cheshire Water Board, labelled Prenton Pumping Station—Flamed tap in softening house. Raw water—after chlorination.

Taken by C. Hardman. Witness W. Leyland. Date 26/3/46. 3-46 p.m.

		Chemical Results in parts per 100,000.	
Appearance	Clear and bright.		
Colour	Normal.	Odour	Nil.
Reaction pH.	Neutral : 7.1.	Free Carbonic Acid	2.1.
Electric Conductivity		Alkalinity as Calcium	
at 20°C.	555	Carbonate	18.0
Total Solids, 180°C.	37.0		
Chlorine in Chlorides	6.6.		
Nitrogen in Nitrates	0.28	Nitrites	Absent.
Hardness : Permanent	8.5		
Temporary	16.0		
Total	24.5		
Metals	Absent.		
Free Ammonia	0.0016	Ammoniacal Nitrogen	—
Albuminoid Ammonia	0.0000	Albuminoid Nitrogen	—
Oxygen absorbed in 4 hours at 27°C.	0.005	Free chlorine reaction	absent.

Bacteriological Results.

(Bacteriological sample dechlorinated on collection).

No. of Bacteria per c.c. or ml.	.....
On Agar in 3 days at 20°C.	1
1 day at 37°C.	0
2 days at 37°C.	1
The Bacillus Coli	Present in — Absent in 100 c.c.
Bacillus Welchii	Present in — Absent in 100 c.c.
(B. Enteritidis Sporogenes).	

Report :—This sample is clear and bright in appearance, neutral in reaction and free from iron and other metals. The water is hard in character but not to an abnormal degree, contains no excess of salinity or mineral constituents in solution and is of the highest standard of organic and bacterial purity. These results are normal, very satisfactory, and consistent with a pure and wholesome water suitable for public supply purposes.

Signed GORDON MILES, B.Sc., F.R.I.C.

Analyst's Report.

Analysis of a sample of Water received on 21st August, 1946 from Hoylake Urban District Council, Public Health Department, labelled Grange Pumping Station, Rising Main from Deep Well.

Taken by J. McKeown. Witness R. Roberts. Date 29/8/46. 12.5 p.m.

Chemical Results in parts per 100,000.

Appearance	Clear & bright.		
Colour	Normal.	Odour	Nil.
Reaction pH.	Neutral : 7.1	Free Carbonic Acid	1.3.
Electric Conductivity		Total Solids, 180°C	53.0
at 20 C.	790		
Chlorine in Chlorides	15.8	Alkalinity as Calcium Carbonate	11.5
Hardness: Total	28.5		
Temporary	11.5		
Permanent	17.0		
Nitrogen in Nitrates	0.48	Nitrogen in Nitrites	Absent.
Free Ammonia	0.0000	Ammoniacal Nitrogen	—
Albuminoid Ammonia	0.0000	Albuminoid Nitrogen	—
Oxygen absorbed in 4 hours at 27°C	0.010		
Metals	Iron: less than 0.003 Other metals absent.		

Bacteriological Results.

Number of Colonies developing on Agar per c.c. or ml. in—	1 day at 37°C.	2 days at 37°C.	3 days at 20°C.
	0	0	1
Presumptive Coliform Reaction	Present in —	Absent from 100 c.c.	
Bact. Coli	Present in —	Absent from 100 c.c.	
Cl. welchii Reaction.	Present in —	Absent from 100 c.c.	

This sample is clear and bright in appearance, neutral in reaction and free from metals apart from a negligible trace of iron. The water is hard in character, but not to an excessive degree, and has a high but not excessive content of salinity or mineral constituents in solution. It is of the highest standard of organic and bacterial purity.

The sample is therefore very satisfactory for the raw supply and the results are consistent with a pure and wholesome water suitable for public supply purposes.

(Signed) GORDON MILES, B.Sc., F.R.I.C.

Analyst's Report.

Analysis of a sample of water received on 21st August, 1946, from Hoylake Urban District Council, Public Health Department, labelled Newton Pumping Station, Pump discharge from Rising Main Borehole.

Taken by J. McKeown. Witness R. Roberts. Date 20/8/46. 12.25 p.m.

Chemical Results in parts per 100,000

Appearance	Clear and bright.		
Colour	Normal.	Odour	Nil.
Reaction pH	Neutral : 7.2.	Free Carbonic Acid	1.4
Electric Conductivity at 20°C	460	Total Solids, 180°C	31.0
Chlorine in Chlorides	3.8	Alkalinity as Calcium Carbonate	15.5
Hardness: Total	20.0		
Temporary	15.5		
Permanent	4.5		
Nitrogen in Nitrates	0.32	Nitrogen in Nitrites	Absent.
Free Ammonia	0.0000	Ammoniacal Nitrogen	—
Albuminoid Ammonia	0.0000	Albuminoid Nitrogen	—
Oxygen absorbed in 4 hours at 27°C	0.000		
Metals	Absent.		

Bacteriological Results.

Number of Colonies developing on Agar per c.c. or ml in	1 day at 37°C	2 days at 37°C	3 days at 20°C
	0	0	0
Presumptive Coliform Reaction	Present in —	Absent from 100 c.c.	
Bact. Coli	Present in —	Absent from 100 c.c.	
Cl. welchii Reaction	Present in —	Absent from 100 c.c.	

This sample is clear and bright in appearance, neutral in reaction and free from iron and other metals. The water is hard in character but not unduly so and it contains no excess of salinity or mineral constituents in solution. It is of the highest standard of organic and bacterial purity.

The sample is therefore very satisfactory for the raw supply and the results are consistent with a pure and wholesome water suitable for public supply purposes.

(Signed) GORDON MILES, B.Sc., F.R.I.C.

Analyst's Report.

Analysis of a sample of water received on 21st August, 1946, from Hoylake Urban District Council, Public Health Department, labelled Tap, Rising Main, Hoylake Town Hall, Hoylake. Town Mains.

Taken by J. McKeown. Witness R. Roberts. Date 20/8/46. 11.15 a.m.

Chemical Results in parts per 100,000.

Appearance	Bright, with a very few particles of mineral debris.		
Turbidity	Less than five parts per million, Silica scale.		
Colour	Normal.	Odour	Nil.
Reaction pH	Neutral: 7.1.	Free Carbonic Acid	1.6.
Electric Conductivity at 20°C	660	Total Solids, 180°C.	44.0
Chlorine in Chlorides	11.2	Alkalinity as Calcium Carbonate	13.5
Hardness: Total	16.5		
Temporary	13.5		
Permanent	3.0		
Nitrogen in Nitrates	0.40	Nitrogen in Nitrites	Absent
Free Ammonia	0.0006	Ammoniacal Nitrogen	—
Albuminoid Ammonia	0.0000	Albuminoid Nitrogen	—
Oxygen absorbed in 4 hours at 27°C	0.010	Free Chlorine reaction	Absent
Metals	Absent.		

Bacteriological Results

Number of Colonies developing on Agar per c.c. or ml. in	1 day at 37°C	2 days at 37°C.	3 days at 20°C.
	0	0	0
Presumptive Coliform Reaction	Present in —	Absent from 100 c.c.	
Bact. Coli	Present in —	Absent from 100 c.c.	
Cl. welchii Reaction	Present in —	Absent from 100 c.c.	

This sample is practically clear and bright in appearance, neutral in reaction and free from iron and other metals. The water has moderate hardness and it contains no excess of salinity or mineral constituents in solution. It is of the highest standard of organic and bacterial purity.

These results are consistent with a pure and wholesome water suitable for drinking and domestic purposes.

(Signed) GORDON MILES, B.Sc., F.R.I.C.

Drainage and Sewerage.

Main sewerage is available to all except the most isolated dwellings.

In anticipation of the extensive building development which is expected during the next few years, the Council have given careful consideration to the main drainage of the district. Negotiations are still in progress with the County Boroughs of Birkenhead and Wallasey and the Urban District of Wirral with reference to the total reconstruction of the North Wirral Outfall Sewer, which takes the drainage from areas within the above-mentioned Authorities and Greasby. The preparation of the preliminaries of this scheme have reached an advanced stage and it is expected that in the near future an agreement will be reached with regard to implementing it.

A scheme for the reconstruction of the main drainage system of Hoylake and West Kirby is now being prepared, and the estimated expenditure has been included in the five year post-war programme.

During the past year work has commenced on the laying of surface water sewers near Greenbank Road, Grange. Nine cesspools were abolished and the drains connected with the sewer.

Rivers and Streams.

New sewerage arrangements are expected to overcome difficulties which exist in the vicinity of Caldys cross roads.

Closet Accommodation.

Forty-six dwellings, including twenty which are occupied as summer dwellings only, are provided with closets other than water closets. One pail closet was converted to a water closet during the year.

Public Cleansing.

Refuse is collected from every dwelling house each week during the year and twice per week from shops and three times per week from premises where obnoxious trades are carried on, and twice weekly collections are also given from certain schools and public institutions.

Salvage is collected from householders, conveyed by trailers attached to the freighters to the Depot in Carr Lane, Hoylake.

Disposal of refuse is carried out by tipping on low lying land at Grange, where approximately one acre of land was reclaimed in 1946.

Statistics.

Number of premises, excluding R.A.F. Camp, West Kirby, from which refuse was collected	7,500
Number of bins, including R.A.F. Camp, West Kirby	9,300
Weight of refuse collected per annum	8,100 tons.
Average length of haul to tip	2½ miles.
Net cost of collection and disposal per 1,000 premises visited	£34
Net cost of collection and disposal per 1,000 bins collected	£27

Salvage Collected.

	Tons	Cwts.	Qtrs.	£
Paper	247	10	0	1,433
Kitchen Waste	52	4	2	79
Bones	1	10	0	7
Textiles	20	19	0	277
Metals	28	1	0	63
Bottles and Jars	16	7	0	89
Baled Tins	25	2	0	47
	391	13	2	£1,995

Sanitary Inspection of the Area.

Number and Nature of Inspections Made		Notices Served		Result of Service of Notice		Prosecutions	
		Statutory	Informal	Compiled With	Outstand ^g	Instituted	Pending
Dwelling houses	739	—	214	178	36	—	—
Dwelling house revisits	430	36	—	34	2	—	—
Housing inspections	5	—	—	—	—	—	—
Housing inspection revisits	3	—	—	—	—	—	—
Overcrowding	14	—	—	—	—	—	—
Camping	10	—	—	—	—	—	—
Privies, earth closets	31	—	4	4	—	—	—
Cesspools	21	—	1	1	—	—	—
Drainage	168	12	61	68	5	—	—
Ditches, watercourses	23	—	2	2	—	—	—
Keeping of animals	35	—	6	5	1	—	—
Offensive trades	4	—	—	—	—	—	—
Slaughterhouses	7	—	—	—	—	—	—
Butchers' shops	66	—	10	8	2	—	—
Food premises	140	—	11	10	1	—	—
Bakehouses	51	—	7	5	2	—	—
Shops	44	—	8	8	—	—	—
Dairies	121	—	3	3	—	—	—
Farms	41	—	—	—	—	—	—
Offices	7	—	2	2	—	—	—
Factories	82	—	14	11	3	—	—
Schools	25	—	4	4	—	—	—
Public conveniences	14	—	1	1	—	—	—
Licensed premises	16	—	1	1	—	—	—
Places of entertainment	23	—	1	1	—	—	—
Smoke abatement	15	—	—	—	—	—	—
Rat infestations	296	—	—	—	—	—	—
Verminous premises	31	—	10	10	—	—	—
Offensive accumulations	46	—	16	15	1	—	—
Infectious disease	868	—	—	—	—	—	—
Disinfection	26	—	—	—	—	—	—
Scabies	5	—	—	—	—	—	—
Bins	206	11	72	81	2	—	—
Temporary Dwellings	18	—	—	—	—	—	—
Swimming baths	3	—	—	—	—	—	—
Water supply	6	—	—	—	—	—	—
Ice cream	52	—	—	—	—	—	—
Building licences	837	—	—	—	—	—	—
Certificate for Materials	197	—	—	—	—	—	—
Miscellaneous	109	—	—	—	—	—	—
TOTALS	4,835	59	448	452	55	—	—

Factories Act, 1937.

Three laundries, two artificial tooth factories and a brickworks comprise the only industrial establishments of any size in the district, but, by virtue of the use of mechanical power, bakehouses, shoe repairing establishments, printers and various other small businesses are included in the term "Factory." Workshops also are subject to the Factories Act, 1937.

Eighty-two routine visits were made to these premises during the year, which resulted in the service of fourteen Notices, principally in connection with the maintenance of cleanly conditions in these establishments.

Shops and Offices.

Fifty-one inspections were made of these premises, the ten notices served all being complied with. Statutory requirements in respect of shop hours, provision of seats, washing facilities, etc. are within the jurisdiction of the Cheshire County Council, and are operated by the County Weights and Measures Department.

Camping Sites

Bye-laws for the control of Camping Grounds, made in accordance with the provisions of the Hoyle Urban District Council Act, 1935, are operative for a period of three years. Consent of the Council to the use of land as a Camping Ground was given in one case only.

Smoke Abatement.

Fifteen visits were made during the year to factory premises in regard to this matter. Mitigation, rather than complete removal of nuisance has been all that it has been possible to achieve owing to difficulty in obtaining the correct type of fuel. Mechanical stoking is carried out to all steam raising plants, with two exceptions. Such apparatus, however, requires graded fuel to obtain optimum results and this has not been forthcoming under current conditions.

Swimming Baths and Pools.

There are two open-air public swimming baths in the District, Hoyle Baths and the West Kirby Marine Lake.

Filtration and chlorination plants are installed at the former and the water of both swimming baths is subjected to periodical bacteriological and chemical examination.

Copies of reports are given below.

Analyst's Report.

Analysis of a sample of water received on 10th July, 1946, from Hoylake Urban District Council labelled Hoylake Swimming Baths (Outlet).

Taken by J. McKeown, witness F. K. Harrop. Date 9 '9 '46. 12.20 p.m.

Chemical Results in parts per 100,000.

Appearance	Bright with slight flocculent deposit of mineral and organic debris.		
Turbidity	Less than 5 parts per million, Silica Scale.		
Colour	Normal.	Odour	Nil.
Reaction pH	Faint Alkaline	Free Carbonic Acid	—
	8.5		
Electric Conductivity at 20°C.	—	Total Solids, 180°C.	—
Chlorine in Chlorides	1560	Alkalinity as Calcium Carbonate	—
Hardness : Total	—		
Temporary	—		
Permanent	—		
Nitrogen in Nitrates	0.08	Nitrogen in Nitrites	Less than 0.001
Free Ammonia	0.0064	Ammoniacal Nitrogen	—
Albuminoid Ammonia	0.0068	Albuminoid Nitrogen	—
Oxygen absorbed in 4 hours at 27°C.	0.170	Free Chlorine Reaction	Absent.
Metals	Iron : Less than 0.003. Other metals absent.		

Bacteriological Results

Number of Colonies developing on Agar per c.c or ml. in	1 day at 37°C.	2 days at 37°C.	3 days at 20°C.
	0	0	17
Presumptive Coliform Reaction	Present in 100 c.c. Absent from 50 c.c.		
Bact. Coli Type II	Present in 100 c.c. Absent from 50 c.c.		
Bact. Coli Type I	Present in — Absent from 100 c.c.		
Cl. welchii Reaction	Present in — Absent from 100 c.c.		

This sample is reasonably clear and bright in appearance and is free from metals apart from a negligible trace of iron. Its reaction is on the alkaline side of neutrality and its content of saline and mineral matter in solution is not excessive. The water is of satisfactory organic quality and bacterial purity.

The water is therefore considered suitable for swimming bath purposes, but in the absence of a residuum of free chlorine it is indicated that the dosage should be increased to ensure maintenance of the bacterial purity of the water.

(Signed) ROY C. HOATHIER, B.Sc., Ph.D., F.R.I.C., M.R.San.I.

Analyst's Report.

Analysis of a sample of water received on 24th April, 1946 from Hoylake Urban District Council, labelled West Kirby Swimming Pool (Sea Water).

Taken by J. McKeown. Witness, Dr. J. Hatton. 23¹/₄/46. 12.30 p.m.

Chemical Results in parts per 100,000.

Appearance	Very faint opalescence with very slight flocculent deposit of mineral and traces of organic debris. Very few infusoria present.		
Turbidity	Less than 5 parts per million, Silica scale.		
Colour	Normal	Odour	Nil.
Reaction pH	Faint Alkaline	Free Carbonic Acid	—
	8.3.		
Electric Conductivity at 20°C	—	Total Solids, 180°C.	—
Chlorine in Chlorides	1720	Alkalinity as Calcium Carbonate	—
Hardness: Total	—		
Temporary	—		
Permanent	—		
Nitrogen in Nitrates	0.00	Nitrogen in Nitrites	Less than 0.001
Free Ammonia	0.0052	Ammoniacal Nitrogen.	—
Albuminoid Ammonia	0.013	Albuminoid Nitrogen.	—
Oxygen absorbed in 4 hours at 27°C	0.090		
Metals	Iron: less than 0.003. Other metals absent.		

Bacteriological Results.

Number of Bacteria growing on Agar per c.c. or ml. in	1 day at	2 days at	3 days at
	37°C	37°C	20°C.
	0	0	8
Presumptive Coliform Reaction	Present in —	Absent from 100 c.c.	
Bact. Coli	Present in —	Absent from 100 c.c.	
Cl. welchii Reaction	Present in —	Absent from 100 c.c.	

This sample of tidal water is reasonably clear and bright in appearance. It is slightly alkaline in reaction and is free from metals apart from a negligible trace of iron. The water conforms to a satisfactory standard of organic quality and bacterial purity.

These results are indicative of a water suitable for the purpose of public bathing.

(Signed) ROY C. HOATHER, B.Sc., Ph.D., F.R.I.C., M.R.San.I.

Eradication of Bed Bugs.

Number of houses found to be infested :—

(a) Council houses	.....	.....	.....	Nil.
(b) Other houses	.....	.....	.....	24

Number of houses disinfested :—

(a) Council houses	....	.....	.....	Nil.
(b) Other houses	....	.....	.....	24

Method employed :—Spraying with D.D.T. Insecticide.

Schools.

All the schools of the district are supplied from the public water supply and all are provided with water closets. The condition of some of the older schools is far from satisfactory. The replacement of these old buildings by modern schools is a matter which is engaging the attention of the Education Authority.

Housing.

The District, in common with many others, is suffering from an acute shortage of housing accommodation. A measure of the urgency of local needs is indicated by the fact that the number of applicants for Council houses who were resident in Hoylake previous to 1939 is approximately 500 to 600.

The erection of new houses was authorised by the Ministry of Health in August, 1945, and since that date the following premises have been commenced in the District:—

Description	Local Authority	Private Enterprise	Total
No. of new houses erected since 1st August, 1945	10	88	99
No. of totally destroyed war damaged houses erected since 1st August, 1945	—	1	
No. of flats provided since 1st August, 1945	13	76	89
Total	<u>23</u>	<u>165</u>	<u>188</u>

	Local Authority	Private Enterprise	Total
No. of new houses under erection	70	30	109
No. of war damaged houses under erection	—	9	
No. of flats under conversion	—	17	17
Total	<u>70</u>	<u>56</u>	<u>126</u>

The Local Authority have entered into contracts for the erection of the following houses:—

Black Horse Hill Estate, Grange	32
Gresford Avenue Estate, Grange	51
Cortsway, Greasby	46
Frankby Road, Grange	44
Total	<u>173</u>

Land has been purchased and laid out for an additional 160 houses on the Black Horse Hill Estate and it is anticipated that contracts will be let for these during the ensuing year.

The Health Department has continued the inspection of works of repair and maintenance under the Civil Building Licensing Scheme and since the 1st August, 1945, 1,951 licences have been issued to a value of £151,000.

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.

There are twenty-five cow-keepers on the register, twenty being wholesale purveyors and four retail purveyors of milk. The designation of the milk produced and the distribution thereof is indicated in the following table :—

Designation	Number	Milk Retailed		
		Locally	In Other Districts	Sent for Pasteurisation
Tuberculin Tested	1	1	—	—
Accredited	15	11	—	4
Ungraded	8	4	1	3
Totals	24	16	1	7

In-coming milk, derived from several external districts, falls in the following categories :—

Tuberculin Tested	....	3
Pasteurised	....	5
Accredited	....	5
Ungraded	....	2

Milk Sampling.

Samples of milk supplies were taken for bacteriological and biological examination and the results obtained are set out in the table below :—

Designation	Number of Samples	B. Col		Methy- lene Blue		Phos- phatase		Tubercle Bacilli	
		Passed	Failed	Passed	Failed	Passed	Failed	Positive	Negative
Pasteurised	6	—	—	—	—	6	—	—	—
Accredited	47	43	4	42	1	—	—	9	33
Tuberculin Tested	9	9	—	8	1	—	—	—	8
Ungraded	28	28	—	26	2	—	—	1	20
Totals	90	80	4	76	4	6	—	10	61

In view of the high proportion of samples positive for tubercle bacilli, namely, 10 in 61 samples, it is fortunate that by far the greater proportion of the milk sold in the district is pasteurised. All schools—eight Primary, two Secondary and twelve Private—are now supplied with milk of this grade.

There are nineteen dairymen and retail purveyors of milk. The largest suppliers retail pasteurised milk. Designated Milk Licences were granted as follows :—

Tuberculin Tested Dealers' Licences	.....	.....	13
Tuberculin Tested Supplementary Licences	.....		1
Pasteurised Supplementary Licences	.....	....	2

Meat and Other Foods.

Meat Inspection.

Home killed meat sold in this district is derived from an abattoir operated by the Ministry of Food at Bebington. Since several other districts are also served by this establishment, inspection involves practically the whole-time presence of one of the Bebington Inspectors and this Council, in common with the other areas, contributes towards his salary.

Meat which was found on routine examination at local butchers' shops to be unfit for human consumption was returned to the above abattoir for bulk condemnation and salvage. The only consignment so returned amounted to 198lbs.

Two premises were licensed by the Council as slaughterhouses, subject to necessary works of improvement being carried out as and when slaughtering becomes decentralised. Seven slaughtermen's licences were issued.

Food Premises.

Considerable time has been taken up by visits to food premises, following requests by retailers for the issue of Surrender Notes, which are the pre-requisites for the replacement of supplies and points by the Food Control Authorities.

The following is a list of the principal foods surrendered :—

Article Condemned	Quantity	Reason for Condemnation
Canned Meat and Meat Products	105 tins.	Blown. Perforated.
Beef	198 lbs.	Bone Taint.
Bacon	18 lbs.	Decomposition.
Canned Fish	93 tins	Blown. Perforated.
Canned Vegetables	69 tins	Blown. Perforated.
Vegetables	80 lbs.	Decomposition.
Canned Fruit	14 tins.	Blown. Perforated.
Fruit	250 lbs.	Decomposition.
Canned Milk	357 tins.	Blown. Perforated.

Disposal was carried out with due regard to the salvage aspect.

Ice Cream.

Allocations of the ingredients necessary for the manufacture of ice cream are made by the Food Authorities to fifteen persons who were manufacturers of this commodity in the basic year 1939. Nine of this number manufacture ice cream at premises within the district, the remainder having transferred their allocation to large scale manufacturers and receive the finished article in return, and so are now concerned only with the retail side. One manufacturer has improved his premises in anticipation of the new regulations which are, at present, in draft form only.

Examination of nineteen samples during the year showed the presence of B.Coli in three cases.

Adulteration.

This work is undertaken by the Cheshire County Council.

**List of Samples obtained in the Hoylake Urban District during
the year ended 31st December, 1946.**

Name of Sample	Number Obtained	Number adulterated or not up to the recognised stand- ard of quality.
Butter	2	—
Bacon	2	—
Boracic Ointment	2	—
Baking Powder	1	—
Cod Liver Oil Capsules	1	—
Cheese	2	—
Cooking Fat	1	—
Castor Oil	1	—
Coffec	1	—
Cocoa	1	—
Cake Flour Mixture	2	—
Curry Powder	1	—
Fish Paste	1	—
Ginger, Ground	2	—
Glycerine	1	—
Milks	42	2
Margarine	2	—
Syrup of Figs	1	—
Semolina	2	1
Sugar	2	—
Sweets	4	—
S.R. Flour	1	—
Saccharin	2	—
Sponge Mixture	1	—
Spice, Mixed	1	—
Tea	2	—
Vinegar	1	—
Zinc Ointment	1	—
TOTALS	83	3

Particulars of Non-Standard Samples during the Year ended 31st December, 1946.

Article	Analysis	Remarks
1. Milk	2.3%, deficient in Non-fatty Solids. Genuine.	No action. Abnormal.
2. Milk	6.6%, deficient in Fat.	No action. Four other samples taken from same seller at same time were genuine
3. Semo-lina.	Infested with weevils. Unfit for human consumption.	Particulars sent to Sanitary Inspector of Hoylake U.D.C. for any necessary action.

Shellfish.

Shellfish layings are located on the Hoylake Foreshore at Spencer's Spit (cockles), adjoining Hilbre Island (mussels), and a third (cockles) has recently developed below Tanskey Rocks at West Kirby.

By an amended Order which came into operation on 1st July, 1944, the prescribed area from which the taking of mussels and cockles is prohibited for sale for human consumption is delineated as "The foreshore of the River Mersey on the Cheshire side thereof between the Manchester Ship Canal and the Red Stones at Hoylake, the western limit being the boundary of the Customs Port of Liverpool, i.e. an imaginary line drawn approximately north-north-east true from Hilbre Point to join a line drawn from Formby Point in a true north-north-westerly direction and extending to a distance of three miles from low water mark along the coast within the aforesaid limits."

The responsible Authority, under the Public Health Shellfish Regulations, 1934, is the Liverpool Port Health Authority. This Order has reference to the major part of the first mentioned laying only. The taking of shellfish from the other two, which comes within the jurisdiction of the Chester Port Health Authority, is not the subject of any Order made under the Public Health Shellfish Regulations, 1934.

**Rats and Mice (Destruction) Act, 1919.
Infestation Order, 1943.**

The Council acts as agent for the Cheshire County Council in respect of the Rats and Mice Destruction Act, 1919, in regard to the built-up areas of the district only, the agricultural holdings and railway property being excluded. One Rat Catcher is employed, his wages being borne by the County Council in respect of treatment of properties other than those which are Council owned. Eighty-six complaints of minor infestation were dealt with during the year in addition to routine inspection and treatment of focal points of infestation.

Scabies.

The use of Eastfield Hostel for the treatment of scabies cases has been discontinued. One infected family was treated at home with benzyl benzoate emulsion during the year.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS
AND OTHER DISEASES.

Notifiable Diseases (other than Tuberculosis) for the Year 1946.

Disease	Number of Cases Notified											Deaths
	At ages—Years											
	Total Under 1	1—3	3—5	5—10	10—15	15—25	25—45	45—65	65 and over	Cases admitted to Hospital.		
Scarlet Fever	68	—	3	4	34	22	3	2	—	—	41	—
Diphtheria	12	—	—	—	5	—	4	3	—	—	12	—
Pneumonia	35	—	—	1	—	—	19	5	6	4	2	13
Measles	85	—	17	28	34	3	1	2	—	—	3	—
Whooping Cough	58	1	12	25	17	—	—	2	1	—	—	—
Cerebro Spinal Fever	3	—	1	—	—	—	1	1	—	—	3	—
Erysipelas	6	—	—	—	—	1	—	1	2	2	2	—
Typhoid	1	—	—	—	—	—	—	1	—	—	1	—
Paratyphoid	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	2	—	—	—	—	—	1	1	—	—	—	1
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis	1	—	—	—	1	—	—	—	—	—	1	—
TOTALS	271	1	33	58	91	26	29	18	9	6	65	14

Infectious Disease.

The figures in the preceding table include the following cases of infectious disease which occurred at the various institutions in the district, *i.e.*, Children's Convalescent Home, West Kirby and The Ellen Gonner Home, Hoylake.

Age	Disease			Totals
	Scarlet Fever	Diphtheria	Measles	
Under 1	—	—	—	—
1—3	—	—	6	6
3—5	2	—	6	8
5—10	8	5	1	14
10—15	12	—	—	12
15—25	—	—	—	—
TOTALS	22	5	13	40

Case Rates for Certain Infectious Diseases in the Year, 1946.

Provisional Figures based on Weekly and Quarterly Returns.

	England and Wales	126 C.B.s and Great Towns including London	148 Smaller Towns Res. pop. 25,000— 50,000 at 1931 census	London Adm. County	Hoylake
Notifications :—	Rates per 1,000 Civilian Population :—				
Typhoid Fever	0.01	0.01	0.01	0.01	0.04
Paratyphoid Fever	0.02	0.02	0.01	0.01	0.00
Cerebro Spinal Fever	0.05	0.05	0.04	0.06	0.12
Scarlet Fever	1.38	1.51	1.33	1.42	2.61
Whooping Cough	2.28	2.48	2.05	2.22	2.22
Diphtheria	0.28	0.32	0.31	0.24	0.46
Erysipelas	0.22	0.25	0.22	0.27	0.23
Smallpox	0.00	0.00	0.00	0.00	0.00
Measles	3.92	4.73	3.70	7.35	3.26
Pneumonia	0.89	1.02	0.74	0.75	1.34
Notifications :—	Rates per 1,000 Total Births (Live and Still) :—				
Puerperal Fever	} 8.50	10.35	7.63	{ 1.62	0.00
Puerperal Pyrexia					
				*9.68	

*Including Puerperal Fever.

Diphtheria Immunisation.

Number of Diphtheria Immunisation Clinics held during 1946.			19
Number of children who completed full course of primary immunisation during 1946.	Age at date of final injection.		Total
	Under 5 years	5—15 years	
	198	43	241
Total number of children who were given a reinforcing injection during 1946.	16		

Immunisation in Relation to Child Population.

Number of Children who had completed a full course of Immunisation at any time up to 31st December, 1946.

Age at 31/12/46 <i>i.e.</i> Born in Year	Under 1 1946	1 1945	2 1944	3 1943	4 1942	5—9 1937- 1941	10—14 1932- 1936	Total under 15
Number Immunised	—	99	145	138	130	800	849	2,161
Estimated mid-year population 1946.	1,760					3,230		4,990
Percentage immunised to child population.	29.1%					51.1%		43.3%

Diphtheria Notifications and Deaths in relation to Immunisation.

Notifications			Deaths		
Age at date of Notification	Number of Cases Notified	Number of cases included in preceding column in which the child had completed a full course of immunisation	Age at date of Death	Number of Deaths	Number of cases included in preceding column in which the child had completed a full course of immunisation
Under 1	—	—	Under 1	—	—
1	—	—	1	—	—
2	—	—	2	—	—
3	—	—	3	—	—
4	—	—	4	—	—
5 to 9	5	—	5 to 9	—	—
10 to 14	—	—	10 to 14	—	—
TOTALS	5	—	TOTALS	—	—

Note : Of the cases notified, all were non-residents, *i.e.*, inmates of Children's Institutions.

Prevention of Blindness.

No action has been taken by the District Council under Section 176 of the Public Health Act, 1936, for the prevention of blindness or for the treatment of persons suffering from any disease or injury to the eyes.

This work is undertaken in the District by the Cheshire County Council.

Tuberculosis.

No action has been taken during 1946 under the Public Health (Prevention of Tuberculosis) Regulations, 1925, relating to persons suffering from pulmonary tuberculosis employed in the milk trade, or under Section 172 of the Public Health Act, 1936, relating to the compulsory removal to a hospital of persons suffering from tuberculosis.

New Cases and Mortality during 1946.

AGE PERIODS	NEW CASES				DEATHS			
	Pulmonary		Non-pulmonary		Pulmonary		Non-pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	—	—	—	—	—	—	—	—
1—5 years	—	—	1	—	—	—	—	1
5—15 years	—	—	2	—	—	—	1	2
15—25 years	—	2	—	—	—	1	—	—
25—35 years	2	1	—	—	1	—	—	—
35—45 years	—	1	—	—	—	—	—	—
45—55 years	5	—	—	—	1	—	—	—
55—65 years	2	1	—	—	3	—	—	—
65 years and over	—	—	—	—	1	1	—	—
TOTALS	9	5	3	—	6	2	1	3

Note: (1). 3 of the Male Pulmonary cases notified are ex-Servicemen.

(2). Of the total deaths from tuberculosis 33.3% had not been notified.

Tuberculosis.

	PULMONARY			NON-PULMONARY			Pulmonary and Non-Pulmonary TOTAL
	Males	Females	Total	Males	Females	Total	
Number of cases of Tuberculosis on the Register at the beginning of 1946.	67	53	120	33	33	66	186
Number of cases notified under the Regulations for the first time during 1946.	8	5	13	3	—	3	16
Number of cases removed from the Register during a preceding year which have been restored to the Register during the year	—	—	—	—	—	—	—
Number of cases added to the Register during the year which have been brought to notice otherwise than by Notification under the Regulations	5	4	9	—	—	—	9
Number of cases removed from the Register during the year	19	17	36	19	20	39	75
Number of cases remaining on the Register at 31st December, 1946.	61	45	106	17	13	30	136

NESTON URBAN DISTRICT.

Neston was constituted an Urban District in 1894 and was extended on 1st April, 1933 by the inclusion of the Parish of Ness and parts of the Parishes of Burton, Puddington, Eastham, Willaston, Raby and Thornton Hough.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (acres)	8,497
Registrar-General's Estimate of Resident Population (mid-1946)	9,212
Number of inhabited houses	2,562
Rateable value	£71,230
Sum represented by a penny rate	£280

Until a new census is taken, the estimate of the population must be regarded as provisional.

The area is residential and agricultural. The aforesaid occupation of fishing still predominates at Parkgate. There are a number of scholastic institutions. Light industries of a type new to the district have been established.

The natural increase of a population is the excess of births over deaths. The following table shows the condition 1939—1946 in Neston :—

Year	Population	Natural Increase per 1,000 of Population.	
1939	8,606	28 more births than deaths	+3.3
1940	8,956	39 more births than deaths	+4.4
1941	9,468	28 more births than deaths	+3.0
1942	9,645	17 more births than deaths	+1.8
1943	9,275	61 more births than deaths	+6.6
1944	8,897	51 more births than deaths	+5.7
1945	8,715	45 more births than deaths	+5.2
1946	9,212	61 more births than deaths	+6.6

Extracts from Vital Statistics for the year 1946.

These statistics are calculated on a population of 9,212, the estimate furnished by the Registrar-General.

Live Births.	Total	Males	Females
Legitimate	167	84	83
Illegitimate	6	3	3
Totals	173	87	86

Birth Rate per 1,000 estimated resident population	18.8
Birth Rate for England and Wales	19.1
Birth Rate in 148 Smaller Towns, England and Wales, (population 25,000—50,000)	21.3

Stillbirths.	Total	Males	Females
Legitimate	3	1	2
Illegitimate	—	—	—
Totals	3	1	2

Rate per 1,000 total (live and still) births	17.0
Rate per 1,000 total (live and still) births for England and Wales	27.1

Deaths.	Total	Males	Females
	112	51	61

Death Rate per 1,000 of estimated resident population	12.2
Death Rate for England and Wales	11.5
Death Rate for 148 Smaller Towns, England and Wales, (population 25,000—50,000)	11.7

The Registrar-General has not supplied a Comparability Factor since 1940, because the variety and magnitude of local population movements and the uneven incidence of civilian war deaths have together combined to frustrate the attempt to secure comparability between local death rates by the use of Areal Comparability Factors and the preparation and issue of such factors have been suspended for the present.

The absence of a Comparability Factor precludes a comparison between the former two rates.

Deaths from Puerperal Causes.

	Deaths	Rate per 1,000 total (live and still) births.
Puerperal and post abortive sepsis	Nil.	—
Other maternal causes	1	5.7

Death Rate of Infants under 1 year of age :—

	Total	Males	Females
Legitimate	8	5	3
Illegitimate	2	2	—
Totals	10	7	3

All infants per 1,000 live births 57.8

Legitimate infants per 1,000 legitimate live births 47.9

Illegitimate infants per 1,000 illegitimate live births 333.3

Infant Mortality Rate for England and Wales 43

Infant Mortality Rate for 148 Smaller Towns, England and
Wales (population 25,000—50,000) 37

Deaths from Cancer (all ages) 14

Deaths from Measles (all ages) Nil.

Deaths from Whooping Cough (all ages) Nil.

Deaths from Diarrhoea (under 2 years) 1

Number of Deaths during Years 1939—1946.		
Year	Number	Rate per 1,000 per annum
1939	117	13.3
1940	117	13.1
1941	117	12.4
1942	118	12.2
1943	109	11.7
1944	120	13.5
1945	94	10.8
1946	112	12.2

Deaths at Various Ages During 1946.	
Age	Number of Deaths
Under 1 year	10
1 year and under 2	1
2 years and under 5	1
5 years and under 15	1
15 years and under 25	3
25 years and under 35	2
35 years and under 45	7
45 years and under 55	7
55 years and under 65	13
65 years and under 75	32
75 years and under 85	25
85 years and over	10
Total	112

Table of Infantile Mortality, 1939—1946.

Death rate of infants under 1 year of age (per 1,000 live births) :—

Year	Neston	England and Wales
1939	40.5	50
1940	30.7	55
1941	72.4	59
1942	22.2	49
1943	41.1	49
1944	64.3	46
1945	43.2	46
1946	57.8	43

The Infant Mortality Rate in the 148 Smaller Towns was 37 in 1946.

Infantile Deaths.

The causes of death of children under the age of one year are shown below.

Cause of Death	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	4 weeks and under 3 months	3—6 months	6—9 months	9—12 months	Total deaths under 1 year
Pneumonia	—	1	—	—	—	—	—	—	1
Bronchitis	—	—	—	—	1	—	—	—	1
Congenital Malformation, Birth Injuries and Infantile Diseases.	3	—	—	—	2	—	—	—	5
Gastro Enteritis	—	—	—	—	1	—	—	—	1
Premature Birth	2	—	—	—	—	—	—	—	2
Total	5	1	—	—	4	—	—	—	10

Causes of Death.

The table below was compiled from figures supplied by the Registrar-General, and the classification is given according to the cause of death.

Causes of Death	Males	Females	Total
1. Typhoid and Paratyphoid Fevers	—	—	—
2. Cerebro Spinal Fever	—	—	—
3. Scarlet Fever	—	1	1
4. Whooping Cough	—	—	—
5. Diphtheria	—	—	—
6. Tuberculosis of Respiratory System	2	3	5
7. Other forms of Tuberculosis	1	—	1
8. Syphilitic diseases	—	—	—
9. Influenza	—	—	—
10. Measles	—	—	—
11. Acute Polio-Myelitis and Polio-encephalitis	—	—	—
12. Acute Infectious Encephalitis	—	—	—
13. Cancer of buccal cavity and oesophagus (M) uterus (F)	1	—	1
14. Cancer of Stomach and Duodenum	2	2	4
15. Cancer of breast	—	1	1
16. Cancer of all other sites	6	2	8
17. Diabetes	—	—	—
18. Intracranial vascular lesions	7	10	17
19. Heart disease	14	22	36
20. Other diseases of circulatory system	1	4	5
21. Bronchitis	2	—	2
22. Pneumonia	1	3	4
23. Other respiratory diseases	—	1	1
24. Ulcer of stomach or duodenum	—	—	—
25. Diarrhoea under 2 years	1	—	1
26. Appendicitis	—	—	—
27. Other digestive diseases	—	3	3
28. Nephritis	—	1	1
29. Puerperal and post-abortion sepsis	—	—	—
30. Other maternal causes	—	1	1
31. Premature birth	1	1	2
32. Congenital malformation, birth injuries, infantile diseases	3	2	5
33. Suicide	1	—	1
34. Road traffic accidents	1	1	2
35. Other violent causes	1	1	2
36. All other causes	6	2	8
TOTALS	51	61	112

SUMMARY OF VITAL STATISTICS FOR 1946 AND PREVIOUS YEARS.

Year	LIVE BIRTHS			DEATHS										Natural Increase (Excess of Births over Deaths)	
	Population Estimated Mid-Year	Rate England & Wales		Total Number Registered in District	Transferrable		Under 1 year of age			At all ages					
		Number	Rate		Of Non-Residents Registered in District	Of Residents Not Registered in District	Number	Rate per 1,000 Live Births	Rate England & Wales	Number	Rate	Standard Rate for Comparison with England & Wales	Rate England & Wales		
1939	8,606	145	16.9	15.0	92	6	31	6	40.5	50	117	13.3	13.7	12.1	+28
1940	8,956	156	17.4	14.6	90	8	35	5	30.7	55	117	13.1	12.4	14.3	+39
1941	9,468	145	15.3	14.2	92	14	39	11	72.4	59	117	12.4		12.9	+28
1942	9,645	135	14.0	15.8	100	19	37	3	22.2	49	118	12.2		11.6	+17
1943	9,275	170	18.3	16.5	68	8	49	7	41.1	49	109	11.7		12.1	+61
1944	8,897	171	19.2	17.6	79	12	53	11	64.3	46	120	13.5		11.6	+51
1945	8,715	139	16.0	16.1	71	9	32	6	43.2	46	94	10.8		11.4	+45
1946	9,212	173	18.8	19.1	85	13	40	10	57.8	43	112	12.2		11.5	+61

Natural Increase (Excess of Births over Deaths)

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

Public Health Officers.

Details are given on page 2.

Laboratory Facilities.

A private laboratory is employed for the routine examination of clinical material and for the investigation of disease.

Food and Drugs throughout the District are submitted for analysis to the Cheshire County Laboratory. The samples are taken by County Officers.

Water supplies, swimming baths and sewage effluents are investigated for the Council by the Counties Public Health Laboratories.

The Municipal Laboratories at Birkenhead are employed for the examination of milk and ice cream samples.

Ambulance Facilities.

The authorities at the County General Hospital, Clatterbridge, undertake the transport of accident, sick and maternity cases to the Hospital.

The Wirral Joint Hospital Board are responsible for the removal of infectious cases.

The ambulances of the Merseyside Hospitals Council are available for the service of subscribers in this area.

The Ambulance Service which was provided by the Council during the War period was discontinued in 1946.

Nursing in the Home.

The following organisations provide the services of a District Nurse :—

The Neston and Parkgate District Nursing Association—Queen's Nurse.

The Burton and Puddington District Nursing Association.

The Willaston District Nursing Association.

Treatment Centres and Clinics.

The Council's Diphtheria Immunisation Clinic is held in the Town Hall, Neston, on the third Thursday of each month at 2-30 p.m. Supplementary Clinics are also arranged from time to time as required.

Scabies treatment is given by arrangement in the Out-Patients' Department of the Neston Cottage Hospital.

The following Clinics are also provided by the Cheshire County Council :—

	Each Month.	Time.
Child Welfare.	Every Thursday.	2-30 p.m.
Wesleyan Church School-room, Neston.		
School Clinic.	Every Wednesday.	2-30 p.m.
Wesleyan Church School-room, Neston.		
Ear, Nose and Throat Clinic	Every Friday.	9-30 a.m.
Out-Patients' Department County General Hospital, Clatterbridge.		
Tuberculosis Dispensary.		
42, Hamilton Square, Birkenhead. ...	Every Tuesday and Friday.	2-0 p.m.
Venereal Diseases.	Males.	
Birkenhead General Hospital.	Monday, Wednesday and Friday.	5-30—7-0 p.m.
	Females.	
	Tuesday.	5-30—7-0 p.m.
	Wednesday and Friday.	2-0—4-0 p.m.
Chester Royal Infirmary.	Males.	
	Wednesday.	5-0—7-0 p.m.
	Saturday.	12-0—2-0 p.m.
	Females.	
	Monday and Thursday.	5-0—7-0 p.m.

Hospitals.

Voluntary.

The Neston and District War Memorial Cottage Hospital has 25 beds and 2 cots. It is equipped for general surgery, and has Massage and Out-Patient Departments. It is staffed by local Medical Practitioners and visiting Consultants.

The Voluntary Hospitals in Chester, Birkenhead and Liverpool admit patients from this District.

Public.

Isolation Hospital.

The Neston Urban District Council is one of the Constituent Authorities of the Wirral Joint Hospital Board. The Board's Isolation Hospital at Clatterbridge has accommodation for 100 patients. The Hospital has modern cubicle wards and a new nurses' home was constructed in 1937. Infectious patients from this area are treated in the hospital where necessary, and under certain conditions beds may be available for measles and whooping cough cases. At Pensby there is a hospital with 12 beds for convalescent scarlet fever patients.

Smallpox Hospital.

The Wirral Joint Hospital Board have an arrangement with the Liverpool Port Health Authority for the admission of smallpox patients to the Smallpox Hospital at New Ferry.

General.

The County General Hospital at Clatterbridge has been extended and modernised during recent years, and now offers comprehensive services for the investigation and treatment of sickness to residents of this District. The Hospital contains 430 beds, including 34 beds in the Maternity Block, and the hospital has a large staff of resident practitioners and visiting consultants.

Mortuaries.

There is a mortuary at the Neston and District War Memorial Cottage Hospital.

Legislation in Force.

Adopted Acts.

1. Infectious Disease (Prevention Act) 1890.
2. Public Health Acts Amendment Act 1890 (Parts 3, 4).
3. Public Health Acts Amendment Act 1907.
4. Small Dwellings Acquisition Acts 1900.
5. Public Health Act 1925, Part 2, except s. 20.

Bye-Laws.

1. New Streets and Buildings 1930.
2. Offensive Trades 1929.
3. Drainage of Buildings 1933.
4. Slaughterhouses 1937.
5. Nuisances 1938.
6. Buildings 1939.

SANITARY CIRCUMSTANCES OF THE AREA.

Water.

The water supply of the area and of its several parts has been satisfactory both in quality and quantity.

The District receives its supply partly from the Council's own Waterworks and partly from the West Cheshire Water Board.

The position in relation to the Council's new borehole is as described in the Report for 1944.

Frequent sampling of raw and chlorinated water is done. Typical analyses of both are given below.

None of the waters supplied in the area have a plumbo solvent action, and the Analysts' reports have revealed no evidence of contamination.

The Council's supplies are not softened, and have a hardness of 22, expressed in parts per 100,000. Softening of the West Cheshire Water Supply is carried out to the extent indicated on page 21.

Further complaints have been received from residents in the Willaston area, which is supplied by the West Cheshire Water Board, of intermittent discolouration of the supply. A sample was therefore taken and there was some correspondence with the Board. The analyst reported that the water, though discoloured, was not unwholesome.

Every house, with one exception, has a piped supply from the public mains. Details are given below :—

				Dwelling Houses	Population
(a)	House direct	.....	.....	2,561	9,207
(b)	Standpipes	.....	.....	1	5

Analyst's Report.

16th April, 1946.

Analysis of a sample of Water received on 9th April, 1946 from
NESTON URBAN DISTRICT COUNCIL.

Labelled Rising Main to Borehole—Waterworks, Little Neston.

Date 8/4/46. 10-10 a.m.

Taken by A. E. Prince. Witness, J. Booth. Signed A. E. Prince.

Chemical Results in Parts per 100,000

Appearance	Bright with very few particles of mineral debris.		
	Turbidity : Less than 5 parts per million, Silica Scale.		
Colour	Normal.	Odour	Nil..
Reaction pH.	Neutral. 7.2.	Free Carbonic Acid	1.3
Electric Conductivity		Total Solids dried at	
at 20°C.	460	180°C.	31.0
Chlorine in Chlorides.	2.6	Alkalinity as Calcium	
		Carbonate	14.0
Hardness : Total	22.0	Temporary	12.0
		Permanent	10.0
Nitrogen in Nitrates	0.60	Nitrogen in Nitrites	
			Absent.
Free Ammonia	0.0008	Ammoniacal Nitrogen	—
Albuminoid Ammonia	0.0000	Albuminoid Nitrogen	—
Oxygen absorbed in			
4 hours at 27°C.	0.000		
Metals	Absent.		

Bacteriological Results.

Number of Bacteria	} 1 day at 37°C. 2 days at 37°C. 3 days at 20°C.		
growing on Agar per			
cc. or ml. in	} 0 1 2		
Presumptive Coliform Reaction	Present	—	Absent 100 c.c.
Bact. Coli	Present	—	Absent 100 c.c.
Cl. welchii Reaction	Present	—	Absent 100 c.c.

This sample is practically clear and bright in appearance, neutral in reaction and free from iron and other metals. The water is hard in character but not unduly so, contains no excess of salinity or mineral constituents in solution and is of a high standard of organic and bacterial purity.

These results are consistent with a pure and wholesome water suitable for public supply purposes.

(Signed) Gordon Miles, B.Sc., F.R.I.C.

Analyst's Report.

16th April, 1946.

Analysis of a sample of Water received on 9th April, 1946 from
NESTON URBAN DISTRICT COUNCIL.

Labelled Supply Main, Waterworks, Little Neston.

Date 8/4/46. 10-20 a.m.

Taken by A. E. Prince. Witness J. Booth. Signed A. E. Prince.

Chemical Results in Parts per 100,000.

Appearance	.....	Bright, with few particles of mineral debris.	
Colour		Normal.	Odour Nil.
Reaction pH.	.....	Neutral. 7.3.	Free Carbonic Acid 1.0
Electric Conductivity at 20°C.	.....	460	Total Solids dried at 180°C. 31.0
Chlorine in Chlorides		2.6	Alkalinity as Calcium Carbonate 14.0
Hardness : Total	22.0	Temporary 12.0.	
		Permanent 10.0.	
Nitrogen in Nitrates	0.60	Nitrogen in Nitrites	
		Less than 0.001.	
Free Ammonia	0.0002	Ammoniacal Nitrogen	—
Albuminoid Ammonia	0.0002.	Albuminoid Nitrogen	—
Oxygen absorbed in 4 hours at 27°C.	.....	0.000	
Metals	.....	Absent.	'Free chlorine reaction' Absent.

Bacteriological Results.

Number of Bacteria growing on Agar per c.c. or ml. in	1 day at 37°C.	2 days at 37°C.	3 days at 20°C.
	1	1	8
Presumptive Coliform Reaction	Present	—	Absent 100 c.c.
Bact. Coli	Present	—	Absent 100 c.c.
Cl. welchii Reaction	Present	—	Absent 100 c.c.

This sample is practically clear and bright in appearance, neutral in reaction and free from iron and other metals. The water is hard in character but not unduly so and contains no excess of salinity or mineral constituents in solution. It is of the highest standard of organic and bacterial purity.

These results are consistent with a pure and wholesome water suitable for public supply purposes.

(Signed) Gordon Miles, B.Sc., F.R.I.C.

Analyst's Report.

Analysis of a sample of Water received on 21st September, 1946,
from NESTON URBAN DISTRICT COUNCIL.

Labelled Old Mill Hey, Mill Lane, Willaston. Ex Scullery Tap.

Date 20/9/46. 10-15 a.m.

Taken by A. E. Prince. Witness Miss Stephenson-Jones.

Signed A. E. Prince.

Chemical Results in Parts Per 100,000

Appcarance	Opalescent with flocculent deposit of mineral debris from oxide traces of Gallionella.		
	Turbidity: 18 parts per million, Silica scale.		
Colour	Yellow-brown—filtered. Odour Nil.		
	Hazen: 15.		
Reaction pH	On the acid side of neutrality: 6.9		
	Free Carbonic Acid		Trace.
Electric Conductivity	Total Solids dried at		
at 20°C.	100.	180°C.	7.0
Chlorine in Chlorides	1.0.	Alkalinity as Calcium	
		Carbonate	
Hardness: Total 3.5	Carbonate 1.3	Non-Carbonate 2.2	
	(Temporary)	(Permanent)	
Nitrogen in Nitrates	0.00	Nitrogen in Nitrites	
		Less than 0.001	
Free Ammonia	0.0008	Ammoniacal Nitrogen —	
Albuminoid Ammonia	0.0052	Albuminoid Nitrogen —	
Oxygen absorbed in			
4 hours at 27°C.	0.20	'Free Chlorine' Reaction	
3 minutes at 27° C.	0.12	Absent.	
Metals	Total Iron: 0.19 in solution.		
	Other metals absent.		

Bacteriological Results.

Number of Bacteria			
growing on Agar per			
per c.c. or ml. in			
	1 day at 37°C.	2 days at 37°C.	3 days at 20°C.
	—	—	—
Presumptive Coliform Reaction	Present	—	Absent 100 c.c.
Bact. Coli	Present	—	Absent 100 c.c.
Cl. welchii Reaction	Present	—	Absent 100 c.c.

This sample has opalescence and deposit due to presence of an objectionable trace of iron which causes appreciable turbidity. It is free from other metals. The water is practically neutral in reaction, soft in character and has a comparatively low content of mineral constituents in solution. It is of satisfactory organic quality.

The presence of iron does not render the water unwholesome and the water is therefore considered suitable for drinking and domestic purposes. The amount of iron and the consequent impairment of clarity is, however, greater than desirable.

(Signed) Gordon Miles, B.Sc., F.R.I.C.
for the Counties Public Health Laboratories.

Drainage and Sewerage.

Extension of the sewers are necessary in order that the number of cesspools and so-called septic tanks may be reduced. There are some 281 of these private disposal plants in the area and they are the subject of constant complaints.

The Council's Consulting Engineers have reported upon the necessary sewer extensions.

The prevailing type of septic tank is one in which the filtering medium is constantly submerged, and the effluent from such an apparatus is inevitably foul, as the filter is unable either to carry out its biological function or to aerate the tank liquor. It is suggested that wherever possible the recommendations contained in the Technical Appendices to the Housing Manual relating to private disposal plants should be adopted.

Rivers and Streams.

A stream at Willaston is polluted by the effluent from a sewage disposal works, and steps are being taken to withdraw the effluent from the stream.

Closet Accommodation.

The 37 privy middens in the former colliery area are still in existence, and constitute a constant source of annoyance to the residents. A scheme for their abolition was in course of preparation.

Public Cleansing.

Removal of house refuse is carried out by the Urban District Council. One motor vehicle and one horse drawn vehicle are employed.

Disposal is by controlled tipping. The present tipping site is rapidly becoming filled. An area adjacent to the existing tip of approximately half an acre has been acquired to provide for extension.

Salvage.

The following table shows the material dealt with during the year :—

Material	Tons	Weight Cwts.	Qtrs.	£	s.	d.
Paper	22	7	3	142	17	6
Bones	—	17	0	4	6	0
Metal	—	—	—	—	—	—
Rags	1	4	2	10	2	6
Bottles	1	4	0	13	10	6
	25	13	1	170	16	6

Sanitary Inspection of the Area.

Number and Nature of Inspections Made.		Notices Served		Result of Service of Notice		Prosecutions	
		Statutory	Informal	Compiled With	Outstanding	Instituted	Pending
Dwellinghouses :							
Inspected	391	10	53	57	6	—	—
Re Infectious Disease	121	—	1	1	—	—	—
Housing Acts on Com- plaints	123	—	21	16	5	—	—
House to house Inspections	63	6	18	20	4	—	—
Overcrowding	6	—	—	—	—	—	—
Tents, Vans & Sheds	9	—	3	3	—	—	—
Factories	49	1	12	11	2	—	—
Theatres & Cinemas	6	1	—	—	1	—	—
Cowsheds	83	—	8	8	—	—	—
Dairies	16	—	1	1	—	—	—
Milk Samples	7	—	2	2	—	—	—
Premises used for Preparation of Food	114	—	27	23	4	—	—
Fried Fish Shops	4	—	—	—	—	—	—
Ice Cream Premises	12	—	—	—	—	—	—
Water Samples	17	—	—	—	—	—	—
Slaughterhouses	—	—	—	—	—	—	—
Keeping of Animals	12	—	8	8	—	—	—
Schools	18	—	1	1	—	—	—
Sewers, ventilators, etc.	8	—	—	—	—	—	—
Back Passages	2	—	—	—	—	—	—
Drains inspected	23	—	3	3	—	—	—
„ smoke tested	—	—	—	—	—	—	—
„ water tested	—	—	—	—	—	—	—
Septic tanks & cesspools	46	—	16	12	4	—	—
Refuse Collection and Disposal	177	—	—	—	—	—	—
Offensive Accumulations	42	—	21	19	2	—	—
Rats & Mice Destruction	228	—	21	21	—	—	—
Pools, Ditches and Watercourses	33	—	6	6	—	—	—
Privy Middens	159	—	—	—	—	—	—
Public Conveniences	1	—	—	—	—	—	—
Licensed Premises	3	1	—	1	—	—	—
Ashpits and Bins	13	3	10	13	—	—	—
Scabies	24	—	18	18	—	—	—
Sewage effluent samples	—	—	—	—	—	—	—
Verminous persons cleansed	—	—	—	—	—	—	—
Control of Civil Building	398	—	—	—	—	—	—
TOTALS	2,208	22	250	244	28	—	—

Factories Act, 1937.

The factories in the district have been visited from time to time and the attention of the occupiers has been directed to those matters necessary to secure compliance with the Act.

Shops and Offices.

Inspections under Section 10 of the Shops Act, 1934, were made to secure compliance with the provisions of the Section.

Camping Sites.

No Licences were granted during the year under Sections 268 and 269 of the Public Health Act, 1936.

The transient use of roadside wastes and accommodation roads by itinerant van dwellers continues to be a cause of annoyance, and the provisions of the Public Health Act are quite inadequate to control these wanderers. Only by the threatened exercise of imaginary powers, together with close liaison with the police, is any improvement secured. Legislation is needed in order to deal with these people.

Smoke Abatement.

No action was taken under Section 101 of the Public Health Act, 1936, dealing with smoke nuisances.

Swimming Baths and Pools.

There is a privately owned bath at Parkgate. No samples were taken during the year.

Eradication of Bed Bugs.

Number of houses found to be infested :—

(a)	Council Houses	.....	..	.....	Nil.
(b)	Other Houses	.....	.....	....	Nil.

Number of Houses Disinfested :—

(a)	Council Houses	..	.....	Nil.
(b)	Other Houses	.....	.....	Nil.

Schools.

All the elementary schools in the area are supplied from the public water supply. All have water closets, but some are of the trough type. The provision of a standard type of wash down pedestal closet with individual flushing cisterns should be considered, and the children instructed in their proper use.

The provision of washing facilities is often inadequate, and the inadequacy is emphasised by the fact that many children now take their mid-day meal at school. In some instances the accommodation consists of enamelled iron basins sunk in a wooden surround, which rapidly becomes foul. Here too, the advantages of providing a range of modern porcelain enamelled lavatory basins with hot, in addition to cold, water would speedily become evident.

The condition of some of the schools is such that no hygienist would care to defend them. They are obviously out of accord with present day ideas, and suffer from fundamental defects in relation to lighting, ventilation and heating, apart from their deficiencies in sanitary accommodation, to which reference is made above.

Towards the end of 1946 the erection of a new dining hall at the Little Neston C. of E. School was completed.

Housing.

The housing situation is of the utmost gravity. The Council secured authority to acquire compulsorily land for the erection of 150 houses and negotiations for the acquisition of land for temporary houses are taking place.

No attempt can be made to deal with the groups of houses which would normally fall to be dealt with as unfit for human habitation. The three cottages which were the subject of clearance Orders in 1934, and another which was the subject of an undertaking by the owner, remain in occupation.

The issue of licences in pursuance of the scheme of the Control of Civil Building continued to be a function carried out by the Council. During the year 404 licences authorising an expenditure of £20,727 were issued.

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.

There are 39 registered producers, 22 of whom are “ accredited ” and 7 “ attested.”

Licences authorising the use of special designations were granted as follows :—

To

Sell Accredited milk	1
Sell Tuberculin Tested (Certified)	1
Bottle and sell Tuberculin Tested	1
Sell Pasteurised milk—supplementary	3
Sell Tuberculin Tested (Certified)— supplementary	1
Total	7

Milk Sampling.

Designation	B. Coli		Plate Count		Methy- lene Blue		Phos- phatase		Tubercle Bacilli	
	Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed	Positive	Negative
Pasteurised	—	—	—	—	1	—	1	—	—	—
Certified	2	—	—	—	2	—	—	—	—	2
Tuberculin Tested	—	1	—	—	1	—	—	—	—	1
Accredited	6	—	—	—	4	2	—	—	1	4
TOTAL	8	1	—	—	8	2	1	—	1	7

Meat and Other Foods.

The following table shows the quantity of foodstuffs found to be unfit for human consumption :—

Article Condemned	Weight in lbs.	Reason for Condemnation
Canned meat & meat products	30 ¹ / ₄	Blown & punctured containers
Canned fish	48 ¹ / ₄	Blown & punctured containers
Canned fruit & vegetables	89	Blown & punctured containers
Canned milk	140	Blown
Cheese	9 ¹ / ₂	Mould
Dried Fruit	18	Fermentation
Canned Jam	12	Mould
Wet Fish	56	Decomposition
Butter	10	Rancid
Margarine	100 ¹ / ₂	Rancid
Beef (home killed and imported)	489	Bone taint & diseased
Bacon	290	Bone taint
Total weight in lbs.	1,292 ¹ / ₂	

Condemnation Certificates in the form requested by the Ministry of Food (Form M/Cond'n/1) were supplied in each case, and the condemned material was appropriately dealt with, due regard being paid to Ministry of Health Circular 2886 of 17th November, 1943, in this connection.

Adulteration.

Control of the sophistication etc. of food and drugs is in the hands of the Cheshire County Council.

Particulars of samples obtained in the Neston Urban District during 1946 are given below :—

**List of Samples obtained in The Neston Urban District
under the Food and Drug Act, 1938,
during the Year ended 31st December, 1946.**

Name of Sample	Number Obtained	Number adulterated or not up to the recognised standard of quality
Butter	1	—
Bacon	1	—
Cheese	1	—
Cooking Fat	1	—
Castor Oil	1	—
Coffee	1	—
Dried Egg	1	—
Fish Paste	1	—
Ginger, Ground	1	—
Milk	24	10
Margarine	1	—
Malt Vinegar	1	—
Semolina	1	—
Sugar	1	—
Sweets	1	—
Tea	1	—
Vinegar	1	—
Totals	40	10

Particulars of Samples Certified as Non-Standard.

Article	Analysis	Remarks
1. Milk	10% deficient in fat.	Seller cautioned.
2. Milk	13.3% deficient in fat.	Seller cautioned.
3. Milk	10.8% extraneous water	} Prosecuted & fined £15 and £3 13s od costs. Sample taken from each of five churns in course of delivery to a Dairy Company.
4. "	9.9% " "	
5. "	5.2% " "	
6. "	11.7% " "	
7. "	15.0% " "	
8. Milk	2.3% of extraneous water.	} Seller cautioned. Sample taken from each of three churns in course of delivery to a Dairy Company
9. "	3.5% " "	
10. "	4.0% " "	

Shellfish.

There are no layings within the district.

Rats and Mice (Destruction) Act, 1919.**Infestation Order, 1943.**

The scheme outlined in the Report for 1944 continues to function satisfactorily, and there is now no known major or reservoir infestation on premises within the jurisdiction of the Council.

Eleven occupiers of business and domestic premises availed themselves of the services of the rat-catcher.

Scabies.

19 cases of scabies received treatment at the Out-patients' Department of the Neston Cottage Hospital.

PREVALENCE OF, AND CONTROL OVER,
INFECTIOUS AND OTHER DISEASES.

Notifiable Diseases (other than Tuberculosis) for the Year 1946.

Disease	Number of Cases Notified										Cases admitted to Hospital	Deaths
	Total	At ages—Years										
		Under 1	1—3	3—5	5—10	10—15	15—25	25—45	45—65	65 & over		
Scarlet Fever	12	—	1	2	6	3	—	—	—	—	3	1
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	5	—	—	—	—	—	1	1	1	2	—	4
Measles	24	—	6	4	6	7	—	1	—	—	—	—
Whooping Cough	18	—	4	7	5	—	1	1	—	—	—	—
Cerebro Spinal Fever	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid	—	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	8	—	—	2	2	—	1	2	1	—	—	—
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	67	—	11	15	19	10	3	5	2	2	3	5

Case Rates for Certain Infectious Diseases in the Year 1946.

Provisional Figures based on Weekly and Quarterly Returns.

	England and Wales	126 C.B.s and Great Towns in- cluding London	148 Smaller Towns Res. pop. 25,000— 50,000 at 1931 census	London Adm. County	Neston
Notifications :—	Rates per	1,000 Civilian	Population	:—	
Typhoid Fever	0.01	0.01	0.01	0.01	0.00
Paratyphoid Fever	0.02	0.02	0.01	0.01	0.00
Cerebro Spinal Fever	0.05	0.05	0.04	0.06	0.00
Scarlet Fever	1.38	1.51	1.33	1.42	1.30
Whooping Cough	2.28	2.48	2.05	2.22	1.95
Diphtheria	0.28	0.32	0.31	0.24	0.00
Erysipelas	0.22	0.25	0.22	0.27	0.00
Smallpox	0.00	0.00	0.00	0.00	0.00
Measles	3.92	4.73	3.70	7.35	2.61
Pneumonia	0.89	1.02	0.74	0.75	0.54
Notifications :—	Rates per	1,000 Total Births (Live	and Still) :—		
Puerperal Fever	} 8.50	10.35	7.63	1.62	0.00
Puerperal Pyrexia				*9.68	

*Including Puerperal Fever.

Diphtheria Immunisation.

Number of Diphtheria Immunisation Clinics held during 1946.			8
Number of children who completed full course of primary immunisation during 1946.	Age at date of final injection		Total
	Under 5 years	5—15 years	
	68	3	71
Total number of children who were given a reinforcing injection during 1946.	1		

Immunisation in relation to Child Population.

Number of Children who had completed a full course of Immunisation at any time up to 31st December, 1946.

Age at 31/12/46 i.e. Born in Year.	Under 1 1946	1 1945	2 1944	3 1943	4 1942	5—9 1937— 1941	10—14 1932— 1936	Total under 15
Number Immunised	—	32	65	62	62	378	527	1,126
Estimated mid-year population 1946	695					1,330		2,025
Percentage immunised to child population.	31.8%					68%		55.6%

Diphtheria Notifications and Deaths in Relation to Immunisation

Notifications			Deaths		
Age at Date of Notification	Number of Cases Notified	Number of cases included in preceding column in which the child had completed a full course of immunisation	Age at Date of Death	Number of Deaths	Number of cases included in preceding column in which the child had completed a full course of immunisation
Under 1	—	—	Under 1	—	—
1	—	—	1	—	—
2	—	—	2	—	—
3	—	—	3	—	—
4	—	—	4	—	—
5 to 9	—	—	5 to 9	—	—
10 to 14	—	—	10 to 14	—	—
TOTALS	—	—	TOTALS	—	—

Prevention of Blindness.

No action has been taken by the District Council under Section 176 of the Public Health Act, 1936, for the prevention of blindness or for the treatment of persons suffering from any disease or injury to the eyes.

This work is undertaken in the District by the Cheshire County Council.

Tuberculosis.

No action has been taken during 1946 under the Public Health (Prevention of Tuberculosis) Regulations, 1925, relating to persons suffering from pulmonary tuberculosis employed in the milk trade, or under Section 172 of the Public Health Act, 1936, relating to the compulsory removal to a hospital of persons suffering from tuberculosis.

New Cases and Mortality during 1946.

AGE PERIODS	NEW CASES				DEATHS			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	—	—	—	—	—	—	—	—
1—5 years	—	—	—	—	—	—	—	—
5—15 years	—	—	1	—	—	—	—	—
15—25 years	—	—	—	—	1	1	1	—
25—35 years	—	1	—	—	—	—	—	—
35—45 years	—	—	—	—	1	—	—	—
45—55 years	—	—	—	—	—	—	—	—
55—65 years	—	1	—	—	—	1	—	—
65 years and over	—	1	—	—	—	1	—	—
Totals	—	3	1	—	2	3	1	—

Note :— (1) None of the cases notified are ex-Servicemen.

(2) Of the total deaths from tuberculosis 33.3% had not been notified.

Tuberculosis.

	PULMONARY			NON-PULMONARY			Pulmonary and Non-Pulmonary TOTAL
	Males	Females	Total	Males	Females	Total	
Number of cases of Tuberculosis on the Register at the beginning of 1946.	21	16	37	11	15	26	63
Number of cases notified under the Regulations for the first time during 1946.	—	2	2	1	—	1	3
Number of cases removed from the Register during a preceding year which have been restored to the Register during the year	—	—	—	—	—	—	—
Number of cases added to the Register during the year which have been brought to notice otherwise than by Notification under the Regulations	1	2	3	—	—	—	3
Number of cases removed from the Register during the year.	2	5	7	1	—	1	8
Number of cases remaining on the Register at 31st December, 1946.	20	15	35	11	15	26	61

WIRRAL URBAN DISTRICT.

This district was constituted under the Chester Review Order, 1st April, 1933. It includes the Parishes of Heswall, Barnston, Gayton, Irby, Pensby, Thurstaston and parts of Brimstage, Thornton Hough and Arrowe.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (acres)	5,639
Registrar-General's Estimate of Resident Population (mid-1946)	16,370
Number of inhabited houses	4,713
Rateable Value	£143,508
Sum represented by a penny rate	£575

The district is residential. Agriculture, fishing and building trade industries engage a large number of persons. There is a tendency now to the establishment of light industries.

The natural increase of a population is the excess of births over deaths. The following table shows the condition 1939—1946 in Wirral :—

Year	Population	Natural Increase per 1,000 of Population	
1939	13,170	122 more births than deaths	+9.3
1940	17,190	92 more births than deaths	+5.4
1941	18,130	27 more births than deaths	+1.5
1942	17,390	78 more births than deaths	+4.5
1943	16,400	78 more births than deaths	+4.8
1944	16,020	103 more births than deaths	+6.4
1945	15,800	84 more births than deaths	+5.3
1946	16,370	99 more births than deaths	+6.0

Extracts from Vital Statistics for the Year 1946.

These statistics are calculated on a population of 16,370, the estimate furnished by the Registrar-General.

Live Births.	Total	Males	Females
Legitimate	280	143	137
Illegitimate	13	8	5
Totals	293	151	142

Birth Rate per 1,000 estimated resident population	.....	.....	17.9
Birth Rate for England and Wales	.....	.....	19.1
Birth Rate in 148 Smaller Towns, England and Wales, (population 25,000—50,000)	.....	.....	21.3

Stillbirths.	Total	Males	Females
Legitimate	6	4	2
Illegitimate	—	—	—
Totals	6	4	2

Rate per 1,000 total (live and still) births	.....	.....	20.1
Rate per 1,000 total (live and still) births for England and Wales	.....	.....	27.1

Deaths.	Total	Males	Females
	194	93	101

Death Rate per 1,000 of estimated resident population	.....	.....	11.9
Death Rate for England and Wales	.....	.....	11.5
Death Rate for 148 Smaller Towns, England and Wales, (population 25,000—50,000)	.....	.....	11.7

The Registrar-General has not supplied a Comparability Factor since 1940, because the variety and magnitude of local population movements and the uneven incidence of civilian war deaths have together combined to frustrate the attempt to secure comparability between local death rates by the use of Areal Comparability Factors and the preparation and issue of such factors have been suspended for the present.

The absence of a Comparability Factor precludes a comparison between the former two rates.

Deaths from Puerperal Causes.

		Rate per 1,000 total Deaths (live and still) births.
Puerperal and post abortive sepsis	Nil.	—
Other maternal causes	..... Nil.	—

Death Rate of Infants under 1 year of age :—

	Total	Males	Females
Legitimate	7	3	4
Illegitimate	—	—	—
Totals	7	3	4

All infants per 1,000 live births	.....	.....	23.9
Legitimate infants per 1,000 legitimate live births	.....	.....	25.0
Illegitimate infants per 1,000 illegitimate live births	.....	.....	0.0
Infant Mortality Rate for England and Wales	.....	.....	43.0
Infant Mortality Rate for 148 Smaller Towns, England and Wales (population 25,000—50,000)	.....	.....	37.0

Deaths from Cancer (all ages)	.....	.....	38
Deaths from Measles (all ages)	.....	.....	Nil.
Deaths from Whooping Cough (all ages)	.....	.....	Nil.
Deaths from Diarrhoea (under 2 years)	.....	.....	Nil.

Number of Deaths during Years 1939—1946.

Year	Number	Rate per 1,000 per annum
1939	169	11.9
1940	171	9.9
1941	218	12.0
1942	189	10.9
1943	185	11.2
1944	203	12.7
1945	195	12.3
1946	194	11.9

Deaths at Various Ages During 1946.

Age	Number of Deaths
Under 1 year	7
1 year and under 2	—
2 years and under 5	1
5 years and under 15	2
15 years and under 25	—
25 years and under 35	8
35 years and under 45	10
45 years and under 55	12
55 years and under 65	30
65 years and under 75	48
75 years and under 85	65
85 years and over	11
Total	194

Table of Infantile Mortality, 1939—1946.

Death rate of infants under 1 year of age (per 1,000 live births) :—

Year	Wirral	England and Wales
1939	30.5	50
1940	59.7	55
1941	58.4	59
1942	26.2	49
1943	41.8	49
1944	22.9	46
1945	25.1	46
1946	23.9	43

The Infant Mortality Rate in the 148 Smaller Towns was 37 in 1946.

Infantile Deaths.

The causes of death of children under the age of one year are shown below.

Cause of Death	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	4 weeks and under 3 months	3—6 months	6—9 months	9—12 months	Total deaths under 1 year
Premature Birth	1	—	—	1	1	—	—	—	3
Pneumonia	—	—	—	—	—	1	—	—	1
Encephalitis	—	—	—	—	—	—	1	—	1
Congenital Mal-formation, Birth Injuries & Infantile Diseases.	2	—	—	—	—	—	—	—	2
Total	3	—	—	1	1	1	1	—	7

Causes of Death.

The table below was compiled from figures supplied by the Registrar-General, and the classification is given according to the cause of death.

Causes of Death	Males	Females	Total
1. Typhoid and paratyphoid fevers	—	—	—
2. Cerebro spinal fever	—	—	—
3. Scarlet fever	—	—	—
4. Whooping cough	—	—	—
5. Diphtheria	—	—	—
6. Tuberculosis of respiratory system	4	1	5
7. Other forms of tuberculosis	1	1	2
8. Syphilitic diseases	—	—	—
9. Influenza	—	—	—
10. Measles	—	—	—
11. Acute polio-myelitis and polio-encephalitis	—	—	—
12. Acute infectious encephalitis	1	—	1
13. Cancer of buccal cavity and oesophagus (M) uterus (F)	1	1	2
14. Cancer of stomach and duodenum	6	1	7
15. Cancer of breast	—	5	5
16. Cancer of all other sites	11	13	24
17. Diabetes	—	2	2
18. Intracranial vascular lesions	5	7	12
19. Heart disease	36	37	73
20. Other diseases of circulatory system	3	5	8
21. Bronchitis	1	1	2
22. Pneumonia	4	3	7
23. Other respiratory diseases	—	3	3
24. Ulcer of stomach or duodenum	2	1	3
25. Diarrhoea under 2 years	—	—	—
26. Appendicitis	2	—	2
27. Other digestive diseases	1	—	1
28. Nephritis	4	2	6
29. Puerperal and post-abortion sepsis	—	—	—
30. Other maternal causes	—	—	—
31. Premature birth	1	2	3
32. Congenital malformation, birth injuries, infantile diseases	—	2	2
33. Suicide	—	1	1
34. Road traffic accidents	2	—	2
35. Other violent causes	1	1	2
36. All other causes	7	12	19
TOTALS	93	101	194

SUMMARY OF VITAL STATISTICS FOR 1946 AND PREVIOUS YEARS.

Year	Population Estimated Mid-Year	LIVE BIRTHS			DEATHS										Natural Increase (Excess of Births over Deaths)
		Number	Rate	Rate England & Wales	Total Number Registered in District	Transferable		Under 1 year of age			At all ages				
						Non-Residents Registered in District	Residents Not Registered in District	Number	Rate per 1,000 Live Births	Rate England & Wales	Standard Rate for Comparison England & Wales	Rate England & Wales	Number		
1930	13,170	291	22.1	15.0	169	52	52	9	30.5	50	11.9	12.0	12.1	+122	
1940	17,190	263	15.3	14.6	181	82	72	18	59.7	55	9.9	9.3	14.3	+92	
1941	18,130	245	13.5	14.2	258	113	73	15	58.4	59	12.0		12.9	+27	
1942	17,390	267	15.4	15.8	204	80	65	7	26.2	49	10.9		11.6	+78	
1943	16,400	263	16.0	16.5	176	66	75	11	41.8	49	11.2		12.1	+78	
1944	16,020	306	19.1	17.6	182	49	70	7	22.9	46	12.7		11.6	+103	
1945	15,800	279	17.7	16.1	181	55	69	7	25.1	46	12.3		11.4	+84	
1946	16,370	293	17.9	19.1	183	60	71	7	23.9	43	11.9		11.5	+99	

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

Public Health Officers.

Details are given on page 2.

Laboratory Facilities.

A private laboratory is employed for the routine examination of clinical material and for the investigation of disease.

Food and drugs throughout the District are submitted for analysis to the Cheshire County Laboratory. The samples are taken by County Officers.

The Municipal Laboratories at Birkenhead are employed for the examination of milk and ice cream samples.

Ambulance Facilities.

Depot : "Broomfield," Meols Drive, Hoylake.
Telephone: Hoylake 203.

Since April, 1946, a Joint Ambulance Service with the Hoylake Urban District has been maintained. The service provides for the removal of accident and sick cases by day and night.

The authorities at the County General Hospital, Clatterbridge, undertake the transport of accident, sick and maternity cases to the Hospital.

The Wirral Joint Hospital Board are responsible for the removal of infectious cases.

The ambulances of the Merseyside Hospitals Council are available for the service of subscribers in this area.

Nursing in the Home.

This work is undertaken by the following organisations :—

Heswall and District Nursing Association.

Barnston, Thingwall, Woodchurch and District Nursing Association.

Irby District Nursing Association.

Treatment Centres and Clinics.

Diphtheria Immunisation Clinics are conducted by the Council at monthly intervals, and a Clinic for the treatment of scabies is also a Council undertaking.

The following Clinics are also provided by the Cheshire County Council :—

	Each Month.	Time
Child Welfare.		
Methodist School Hall, Telegraph Road, Heswall.	Alternate Mondays.	2-30 p.m.
Village Hall, Thingwall Road, Irby.	Alternate Mondays.	2-30 p.m.
School Clinic.		
Methodist School Hall, Telegraph Road, Heswall.	Every Tuesday.	2-30 p.m.
Village Hall, Thingwall Road, Irby.	Every Wednesday.	10-30 a.m.
Ear, Nose and Throat Clinic.		
Out-Patients' Department, County General Hospital, Clatterbridge.	Every Friday.	9-30 a.m.
Tuberculosis Dispensary.		
42, Hamilton Square, Birkenhead.	Every Tuesday and Friday.	2-0 p.m.
Venereal Diseases.		
Birkenhead General Hospital.	Males.	
	Monday, Wednesday and Friday.	5-30—7-0 p.m.
	Females.	
	Tuesday. Wednesday and Friday.	5-30—7-0 p.m. 2-0—4-0 p.m.

Hospitals.

Voluntary.

The Voluntary Hospitals in Liverpool and Birkenhead admit patients from this District.

The Royal Liverpool Children's Hospital, Heswall, accommodates 242 patients. It is the country branch of the Royal Liverpool Children's Hospital, and was designed originally for the treatment of orthopaedic cases. The hospital admits patients from this area.

The Cleaver Sanatorium belongs to the Corporation of Liverpool, and is used for the accommodation of advanced cases of tuberculosis.

Public.

Isolation Hospital.

The Wirral Urban District Council is one of the Constituent Authorities of the Wirral Joint Hospital Board. The Board's Isolation Hospital at Clatterbridge has accommodation for 100 patients. The Hospital has modern cubicle wards and a new nurses' home was constructed in 1937. Infectious patients from this area are treated in the hospital where necessary, and under certain conditions beds may be available for measles and whooping cough cases. At Pensby there is a hospital with 12 beds for convalescent scarlet fever patients.

Smallpox Hospital.

The Wirral Joint Hospital Board have an arrangement with the Liverpool Port Health Authority for the admission of smallpox patients to the Smallpox Hospital at New Ferry.

General.

The County General Hospital at Clatterbridge has been extended and modernised during recent years, and now offers comprehensive services for the investigation and treatment of sickness to residents of this District. The Hospital contains 430 beds, including 34 beds in the Maternity Block, and the hospital has a large staff of resident practitioners and visiting consultants.

Mortuaries.

The Public Mortuary which is owned by the Urban District Council is situated in Thurstaston Road, Heswall.

The premises are not satisfactory and arrangements have been made for post mortem examinations to be carried out at the mortuary owned by the Hoylake Urban District Council.

Legislation in Force.

Adopted Acts and Conferred Powers.

1. The Council have all the powers and are subject to all the duties conferred or imposed upon an Urban District Council by the general law (Ministry of Health, 1st August, 1933).
2. The Private Street Works Act, 1892.
3. The Public Health (Amendment) Act, 1890 (parts III and IV as amended).
4. The Public Health (Amendment) Act, 1907.
Part II (streets and buildings) as amended, other than sections 21, 30 and 31.
Part VI (recreation grounds) ; and section 94 comprised in Part X (miscellaneous provisions).
(Subject to certain conditions mentioned in Ministry of Health Order 79322 (1934).
5. The Public Health Act, 1925.
Part II (excluding Sections 21, 22 and 24).
Part VI (recreation grounds).
6. Small Dwellings Acquisition Acts, 1899—1945.
7. Slaughter of Animals Act, 1933.
The Council have contracted into the Act (vide Minute 733, 4th December, 1933), so that the Act shall apply to all animals designated therein.

Bye-Laws.

The following Bye-Laws are in force in the Urban District :—

1. Nuisances, made 7th October, 1935 (confirmed by the Ministry of Health, 9th January, 1936).
2. Slaughter-houses, made 7th October, 1935 (confirmed by the Ministry of Health, 20th January, 1936).
3. Smoke Abatement, made 7th October, 1935 (confirmed by the Ministry of Health, 9th January, 1936).
4. New Streets and Buildings, made 7th October, 1935 (confirmed by the Ministry of Health, 20th January, 1936).
5. Tents, Vans, Sheds and similar Structures, made 6th July, 1936 (confirmed by the Ministry of Health, 28th August, 1936).
6. Buildings, made 5th June, 1939 (confirmed by the Ministry of Health, 26th July, 1939).

SANITARY CIRCUMSTANCES OF THE AREA.

Water.

The water supply of the area and its several parts has been satisfactory both in quality and quantity.

The District is supplied by the West Cheshire Water Board. The main source of supply are deep wells at Prenton, Hooton and Mouldsworth, and the water is controlled by frequent chemical and bacteriological examinations. All supplies are chlorinated and samples of raw water and of water going into supply after treatment have been examined. All those examined during the year have proved satisfactory. None of the waters have a plumbo-solvent action. Examples of representative analyses are given on pages 22, 23 and 24 and the extent of the water softening which is carried out by the West Cheshire Water Board is shown on page 21.

Public main supplies are in use throughout the area for drinking, domestic, trade and agricultural purposes, and all permanent dwellings are supplied direct to the house. In the case of certain temporary dwellings, standpipes are in use. Particulars of the number of dwelling houses and of the population supplied from public water mains (a) direct to the house (b) by means of standpipes are given below :—

Dwelling Houses. Population.

(a) House direct	.....	4,613	16,020
(b) Standpipes	.....	100	350

Consumption.

Details of the volume supplied to consumers in this area are not available, but it is estimated that consumption was approximately 30 gallons per head per day.

Drainage and Sewerage.

Parts of Heswall, Irby, Pensby and Thurstaston are sewered to the North Wirral Outfall ; parts of Heswall, Irby, Pensby and Barnston to the Fender Valley Sewer ; Gayton and parts of Heswall to the Dee.

Rapid and extensive building development in the District during the years immediately before the outbreak of war resulted in circumstances which caused overloading of the sewers during heavy rainfall. The problem of providing sewers capable of coping with the new demands of the District is continuing to receive the attention of the Council. Consulting Engineers are engaged in the preparation of a scheme for re-sewering where necessary and application has been made to the Ministry of Health for sanction of £80,760 capital expenditure to enable work to be commenced immediately upon the Fender Valley Sewer.

Rivers and Streams.

During the year attention was given to the routine examination of private sewage treatment tanks and as a result of subsequent action there has been an appreciable improvement in the condition of watercourses.

Closet Accommodation.

The following premises are provided with pail closets :—

Permanent Dwellings	.....	...	36
Temporary Structures	.....	...	58

These are emptied from the permanent dwellings by Council workmen.

Open Spaces.

The District has some 225.5 acres of public open space.

Public Cleansing.

Refuse Collection.

The pre-war service of a weekly collection of domestic refuse and a bi-weekly collection of trade refuse has been restored.

Collection is by two Shelvoke and Drewry 10 cubic yard freighters which have now been in commission for ten years. These vehicles are nearing the end of an active and useful life and the Council is arranging for the purchase of replacement vehicles. The new vehicles will be the best obtainable and an interesting and desirable feature will be the provision of a special cab for the loaders.

The improved collection service now provided has caused an inevitable increase in expenditure but careful costing and checking ensures that the cost of the service compares very favourably with that in similar Districts providing the same frequency of collection.

Refuse Disposal.

All of the refuse was disposed of by controlled tipping in the pit at the rear of the Glegg Arms Hotel. In addition to conducting the tip in accordance with the Ministry of Health recommendations arrangements were made for the open faces to be treated with an insecticide.

The present tip is almost complete and a new tipping site of 5.845 acres in the vicinity of Whitehouse Lane, Barnston, is being purchased. In addition, arrangements are being made to fill in a disused clay pit off Chester Road, Gayton.

Salvage.

The recovery of the maximum amount of salvageable materials continues to be a matter of national concern, and it is gratifying to record that the reduction in the weight of materials collected and returned to industry has now been halted.

Salvage operations, in addition to aiding national economy, continue to assist the local rate fund and during the year the net profit was £560.

Statistics.

Weight of refuse per 1,000 population per day :	.....	11.46 cwts.
Average weight per bin over the whole year :	.....	54.516 lbs. •
Rate in £—Collection (excluding loan charges)	.....	5.119d.
Disposal	.....	1.017d.
		<hr/> 6.136d.
Less net income from salvage	.....	.969d.
		<hr/> 5.167d.
Expenditure per bin collected (excluding loan charges)		5.734d.
Less net income from salvage	.....	.902d.
		<hr/> 4.832d.

Expenditure per ton :

Collection (excluding loan charges)	.....	17/6d.
Disposal	.....	3/6d.
		<hr/> 21/0d.
Less net income from salvage	.....	3/4d.
Total net expenditure per ton excluding Loan Charges and expenditure for new plant out of revenue	.....	<hr/>17/8d.

Statistics (continued).**Expenditure per 1,000 population per annum.**

Collection (excluding loan charges)	.....	£178.16
Disposal	.....	£35.33
		<hr/>
		£213.49
Less net income from salvage	.....	£33.74
		<hr/>
		£179.75
		<hr/>

Expenditure per 1,000 premises per annum.

Collection (excluding loan charges)	.....	£568.99
Disposal	.....	£113.06
		<hr/>
		£682.05
Less net income from salvage	.....	£107.81
		<hr/>
		£574.24
		<hr/>

During the year the following materials were salvaged and sold :—

	Tons	Cwts.	Qrs.	£
Paper	88	6	2	575
Raw Kitchen Waste	76	19	3	135
Concentrated Kitchen Waste	52	16	0	258
Household Bones	1	15	1	10
Textiles	9	0	3	164
Metals	12	3	0	19
Cullet	6	15	0	3
Bottles and Jars	4	19	0	55
	<hr/>	<hr/>	<hr/>	<hr/>
Total	252	15	1	1,219
	<hr/>	<hr/>	<hr/>	<hr/>

Sanitary Inspection of the Area.

Number and Nature of Inspections Made.		Notices Served		Result of Service of Notice		Prosecutions	
		Statutory	Informal	Compiled With	Outstand- ing	Instituted	Pending
Dwelling Houses :							
Inspected on Complaints	231	17	93	82	70	—	—
Re-inspected	1,620	—	—	—	—	—	—
Re Infectious Disease	467	—	—	—	—	—	—
Housing Acts on Com- plaints	61	—	—	—	—	—	—
House to house Inspection	1	—	—	—	—	—	—
Overcrowding	7	—	—	—	—	—	—
Tents, Vans, Sheds	153	—	—	—	—	—	—
Factory and Workshop Acts:	89	—	30	8	22	—	—
Underground bakchouses	—	—	—	—	—	—	—
Other Bakehouses	40	—	10	9	1	—	—
Laundries	2	—	—	—	—	—	—
Outworkers	4	—	—	—	—	—	—
Workplaces	89	—	—	—	—	—	—
Theatres and Cinemas	13	—	—	—	—	—	—
Cowsheds	57	—	26	26	—	—	—
Dairies and Milkshops	44	—	5	5	—	—	—
Milk Samples	122	—	—	—	—	—	—
Food Preparing Premises	89	—	4	—	4	—	—
Fried Fish and Chips Shop	13	—	1	1	—	—	—
Ice Cream Premises	7	—	—	—	—	—	—
Water Supply	14	—	2	2	—	—	—
Slaughterhouse	—	—	—	—	—	—	—
Keeping of Animals	75	—	—	1	—	—	—
Stables	4	—	—	1	—	—	—
Schools	17	—	2	1	1	—	—
Sewers, Ventilators, etc.	5	—	1	1	—	—	—
Street Gullies	4	—	—	—	—	—	—
Drains Inspected	386	—	48	33	17	—	—
Excavations Made	17	—	—	—	—	—	—
Smoke Tested	15	—	—	—	—	—	—
Water Tested	4	—	—	—	—	—	—
Septic Tanks, Cesspools	399	—	20	5	15	—	—
Refusc Collection	258	—	—	—	—	—	—
Refuse Disposal	329	—	—	—	—	—	—
Offensive Accumulations	12	—	8	8	—	—	—
Rats & Mice Destruction Act	4,574	—	—	2	—	—	—
Smoke Observations	14	—	—	—	—	—	—
Smoke Complaints Visited	2	—	—	—	—	—	—
Shops Act Inspections	281	—	44	29	15	—	—
Pools, Ditches, etc.	46	—	—	—	—	—	—
Privy Middens, etc.	70	—	5	4	1	—	—
Public Conveniences	2	—	—	—	—	—	—
Liccned Premises	4	—	—	—	—	—	—
Ashpits and Bins	202	6	163	60	123	—	—
Miscellaneous	58	—	6	5	1	—	—
Outstanding from 1945	—	6	56	—	—	—	—
TOTALS	9,901	29	524	283	270	—	—

Sanitary Improvements Effected during 1946.

Houses:—

Roofs Repaired	32
Rain Water Gutters Repaired or Renewed	7
Down Spouts Repaired or Renewed	7
Walls Pointed or Repaired	6
Ventilation Improved	1
Windows Repaired	20
Window Fasteners Renewed	3
Windows Made to Open	4
Firegrates Repaired	14
Ovens Repaired or Renewed	5
Plastering to Firegrates Repaired	10
Hearthstones Repaired or Renewed	2
Floors Relaid or Repaired	27
Skirting Boards Repaired or Renewed	9
Wall Plaster Repaired	25
Ceiling Plaster Repaired	28
Doors Repaired	7
Door Fasteners Repaired or Renewed	5
Sinks Repaired or Renewed	24
Sink Waste Pipes Repaired	16
Sink Waste Pipes Trapped	9
Washing Boilers Repaired	11
Washing Boilers New Pans Provided	4
Washing Boilers Firegrates Repaired	5
Washing Boilers Flues Repaired	1
Dampness Remedied	37
Yard Surfaces Relaid or Repaired	12
Yard Surfaces—Proper Means of Drainage Provided	3
Sufficient Water Supply Provided	1

Drainage:—

New Drains Constructed	1
Old Drains Reconstructed	5
Drains Repaired	10
Drains Ventilated	1
Drains Under Houses Abolished	1
Drains Cleansed	68
Self Cleansing Gullies Provided	1

Water Closets :—							
Roof Repaired	.....	.....	.....	.....	.....	.....	9
Walls Repaired	.....	.....	.....	.....	.....	.....	5
New Basins Fixed	.....	.....	.....	.....	.....	.....	17
Connections Repaired	.....	.....	.....	.....	.....	.....	21
Cisterns Repaired or Renewed	.....	.....	.....	.....	.....	.....	12
Provided with a Sufficient Supply of Water	.....	.....	.....	.....	.....	.....	8
Doors Repaired or Renewed	.....	.....	.....	.....	.....	.....	4
Seats Repaired or Renewed	.....	.....	.....	.....	.....	.....	8
Ashbins :—							
Ashbins Provided	.....	.....	.....	.....	.....	.....	60
Privies, Pail Closets :—							
Sanitary Conditions Improved	.....	.....	.....	.....	.....	.....	4
Converted to Water Carriage	.....	.....	.....	.....	.....	.....	2
Cesspools, Septic Tanks :—							
Repaired	.....	.....	.....	.....	.....	.....	2
Nuisances Abated	.....	.....	.....	.....	.....	.....	5
Abolished	.....	.....	.....	.....	.....	.....	1
Dairies and Milk Shops :—							
Limewashed	.....	.....	.....	.....	.....	.....	6
Cowsheds :—							
Limewashed	.....	.....	.....	.....	.....	.....	25
Premises Used for Preparation of Food :—							
Limewashed and Cleansed	.....	.....	.....	.....	.....	.....	9
Miscellaneous (not included above)	.....	.....	.....	.....	.....	.....	28
Total							648

Factories and Workshops.

Administration of the Factories and Workshops Act, 1901, and the Factories Act, 1937.

Inspections			
Premises	Number of Inspections	Number of written Notices	Number of Occupiers Prosecuted
Factories with mechanical power	57	26	—
Factories without mechanical power	163	14	—
Other premises (other than out-workers' premises).	—	—	—
TOTAL	220	40	—

Defects Found				
Particulars	Number of Defects			Number of Offences in respect of which Prosecutions were instituted.
	Found	Remedied	Referred to H.M.I.	
Want of Cleanliness	15	14	—	—
Overcrowding	—	—	—	—
Unreasonable temperature	—	—	—	—
Inadequate ventilation	—	—	—	—
Ineffective Drainage of floors	—	—	—	—
Sanitary Conveniences	Insufficient	5	3	—
	Unsuitable or Defective	—	—	—
	Not separate for sexes	—	—	—
Other Offences (not including offences relating to Home Work or offences under the Sections mentioned in the schedule to the Minister of Health (Factory and Workshop Transfer of Powers) Order, 1921, and re enacted in the 3rd schedule of the Factories Act, 1937).	20	—	20	—
TOTAL	40	17	20	—

Shops and Offices.

Inspection of 281 premises were made during the year and 44 informal notices were served, of which 29 were complied with.

Camping Sites.

Number of Tents, Vans, Sheds and Similar Structures in the District for the year ended 31st December, 1946.

Ward	Vans, Sheds, etc.		Tents (April to September)
	Permanently Occupied	Casually Occupied	
Barnston	6	—	—
Gayton	—	—	—
Heswall	27	33	—
Irby	9	20	1
Pensby	—	—	—
Thurstaston	2	2	—
Totals	44	55	1

Smoke Abatement.

During the year complaints were received in respect of an alleged smoke nuisance from the boiler chimney of a hospital in the District. Observations showed that there was no infringement of the Bye Law controlling the emission of black smoke, but as a result of advisory visits to the premises there was a reduction in the amount of smoke. Fifteen half-hour observations were made, and the average result, in minutes, was as follows:—

Dense Black Smoke	Moderate Black Smoke	Dense Brown Smoke	Little Smoke	No Smoke
—	1	2	15	12

Swimming Baths and Pools.

There are no public baths in the District. There is a private swimming bath at a boys' camp, and this has equipment for chlorination of the water.

Eradication of Bed Bugs.

Number of houses found to be infested :—

(a) Council Houses	.....	.....	.....	.....	Nil.
(b) Other Houses	.....	.....	.....	.....	Nil.

Number of houses disinfested :—

(a) Council Houses	.....	.....	.....	.....	Nil.
(b) Other Houses	.....	.....	.....	.....	Nil.

Schools.

All the elementary schools have main water supply and are provided with lavatory basins and satisfactory conveniences. Good equipment is provided, but is not always used to the greatest advantage.

The sanitary accommodation at one of the temporary schools is unsatisfactory and the Director of Education is arranging for the necessary improvements.

Housing.

Existing Accommodation.

During the year under review there was no apparent improvement in the supply of building materials and labour for repairs and maintenance, consequently there was an increase in the number of complaints of housing defects dealt with by the Health Department.

The issuing of Certificates of Essentiality in accordance with the Ministry of Health Scheme to conserve building materials continued to receive attention.

Two dwellings which are the subject of Confirmed Clearance Orders have been occupied on Licence in accordance with the provisions of the Defence (General) Regulations.

Although it was impossible to make a survey of the District to ascertain the amount of overcrowding, there can be no doubt that the occupants of many dwelling houses exceed the number permitted by the inadequate statutory standard of the Housing Act, 1936.

New Accommodation.

The Council has been very active in attempting to cope with the serious shortage, and proposes to erect 500 houses as follows :—

Temporary pre-fabricated houses	...	40
Permanent houses by Council's Contracts		360
Permanent houses by Private Enterprise for sale to the Council	.....	100

Two of the permanent houses built by the Council's Contractors have been occupied and many more are nearing completion. All of the temporary prefabricated houses have been erected and are occupied.

Permanent Houses Completed during 1946.

Heswall	.....	6
Irby	....	24
Barnston	.....	5
Pensby	....	15
		<hr/>
Total	...	50

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.

There are 26 registered cowkeepers, of whom 17 are accredited producers.

During the year the shippens and dairies at one farm were reconstructed.

Milk sampling is done regularly and systematically and every effort is made to sample all sources of supply four times during each year.

The liaison between this and neighbouring District Councils has been maintained and any adverse reports on samples of milk received immediate and satisfactory attention.

Milk Sampling.

Designation	Number Sampled	B. Coli		Methy- lene Blue		Phos- phatase		Tubercle Bacilli	
		Passed	Failed	Passed	Failed	Passed	Failed	Positive	Negative
Pasteurised	21	—	—	18	3	19	2	—	—
Accredited	63	59	4	58	5	—	—	—	63
Tuberculin Tested	9	9	—	7	2	—	—	—	9
Ungraded	25	24	1	24	1	—	—	—	25
Totals	118	92	5	107	11	19	2	—	97

The following Licences have been granted under the Order during the year :—

“ Accredited.”

Dealers Bottling Licence	2
--------------------------	-------	-------	-------	-------	---

“ Pasteurised.”

Dealers Bottling Licence	5
--------------------------	-------	-------	-------	-------	---

Supplementary Retailing Licence	3
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“ Tuberculin Tested.”

Dealers Bottling Licence	1
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Dealers Retailing Licence	4
---------------------------	-------	-------	-------	-------	---

Supplementary Retailing Licence	1
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Meat and Other Foods.

All premises where food is prepared or offered for sale were the subject of frequent inspections. On 48 occasions articles of food were found to be unfit for human consumption and voluntarily surrendered.

The registered slaughterhouse is closed as a result of the Ministry of Food's scheme for the centralisation of slaughtering, and home killed meat comes from the Bebington abattoir. The Council contributes to the salary of the Meat Inspector.

Ice Cream.

As this Report is being written in May, 1947 it can be recorded that the Ice Cream (Heat Treatment, etc.) Regulations, 1947, are now in force.

Although it will be impossible to implement the provisions of the Regulations until the provision of recording thermometers can be enforced the requirements of the Regulations have been made known to all manufacturers and retailers of ice cream in the District.

Adulteration.

This work is undertaken by the Cheshire County Council.

List of Samples obtained in the Wirral Urban District under the Food and Drugs Act, 1938, during the Year ended 31st December, 1946.

Name of Sample	Number Obtained	Number adulterated or not up to the recognised standard of quality
Butter	1	—
Bacon	1	—
Calcium Lactate Tablets	1	—
Cooking Fat	1	—
Coffee	1	—
Cake Flour Mixture	1	—
Epsom Salts	1	—
Gravy Salt	1	—
Iodised Formalin Tablets	1	—
Milk	25	5
Margarine	1	—
Malt Vinegar	1	—
Meat Paste	1	—
Macaroni	1	—
Nut Toffee	1	—
Prunes	1	—
Seidlitz Powders	1	—
Syrup of Figs	1	—
Sugar	1	—
Toffee	1	—
Vinegar	1	—
Zinc Ointment	1	—
Totals	46	5

Particulars of Samples Certified as Non-Standard.

Article	Analysis	Remarks
1. Milk	9.4% of extraneous water	Seller was fined £5 and £1 1s. costs.
2. Milk.	6.6% deficient in fat	No action. Taken from same seller as No. 1.
3. Milk.	3.5% deficient in non-fatty solids. Genuine.	Appeal to Cow re No. 1.
4. Milk.	2.3% deficient in non-fatty solids.	No action.
5. Milk.	6.6% deficient in fat.	No action.

Shellfish.

There is no record of any laying being worked in the District.

Rats and Mice (Destruction) Act, 1919.

Infestation Order, 1943.

The arrangement for the routine examination and necessary treatment of non-agricultural properties continues to work satisfactorily. A whole-time rat catcher is employed and during the year 113 instances of infestation were dealt with successfully.

Once again test baiting of sewer manholes gave a negative result and the Ministry of Food relieved the Council of the responsibility for further treatment.

In November, following an enquiry from the County Council, the District Council indicated willingness to accept delegated powers under the Rats and Mice (Destruction) Act, 1919. The conclusion of this matter is still awaited.

Scabies.

The Council Cleansing Centre was used on 3 occasions and 6 persons were treated during the year.

PREVALENCE OF, AND CONTROL OVER,
INFECTIOUS AND OTHER DISEASES.

Notifiable Diseases (other than Tuberculosis) for the Year 1946.

Disease	Number of Cases Notified											Cases ad- mitted to Hos- pital	Deaths
	Total	At ages—Years											
		Under 1	1—3	3—5	5—10	10—15	15—25	25—45	45—65	65 & over			
Scarlet Fever	29	—	2	6	13	4	2	2	—	—	18	—	
Diphtheria	5	—	—	—	3	—	2	—	—	—	5	—	
Pneumonia	6	—	—	1	—	1	1	1	2	—	1	7	
Measles	52	—	6	12	27	2	3	1	1	—	1	—	
Whooping Cough	8	1	2	2	3	—	—	—	—	—	—	—	
Cerebro Spinal Fever	1	1	—	—	—	—	—	—	—	—	1	—	
Erysipelas	2	—	—	—	—	—	—	1	1	—	1	—	
Typhoid	—	—	—	—	—	—	—	—	—	—	—	—	
Paratyphoid	—	—	—	—	—	—	—	—	—	—	—	—	
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	
Acute encephalitis lethargica	2	—	1	1	—	—	—	—	—	—	2	—	
TOTAL	105	2	11	22	46	7	8	5	4	—	29	7	

Infectious Disease.

The figures in the preceding table include the following cases of infectious diseases which occurred at the following institution in the district :—The Royal Liverpool Children's Hospital, Heswall.

Age	Disease					Totals
	Scarlet Fever	Diphtheria	Whooping Cough	Measles	Cerebro Spinal Fever	
Under 1	—	—	1	—	1	2
1—3	2	—	—	1	—	3
3—5	1	—	—	—	—	1
5—10	—	1	—	—	—	1
10—15	1	—	—	—	—	1
15—25	—	—	—	—	—	—
TOTALS	4	1	1	1	1	8

Case Rates for Certain Infectious Diseases in the Year 1946.

Provisional Figures based on Weekly and Quarterly Returns.

	England and Wales	126 C.B.s and Great Towns in- cluding London	148 Smaller Towns Res. pop. 25,000— 50,000 at 1931 census	London Adm. County	Wirral
	Rates per 1,000 Civilian Population :—				
Notifications :—					
Typhoid Fever	0.01	0.01	0.01	0.01	0.00
Paratyphoid Fever	0.02	0.02	0.01	0.01	0.00
Cerebro Spinal Fever	0.05	0.05	0.04	0.06	0.06
Scarlet Fever	1.38	1.51	1.33	1.42	1.77
Whooping Cough	2.28	2.48	2.05	2.22	0.49
Diphtheria	0.28	0.32	0.31	0.24	0.31
Erysipelas	0.22	0.25	0.22	0.27	0.12
Smallpox	0.00	0.00	0.00	0.00	0.00
Measles	3.92	4.73	3.70	7.35	3.18
Pneumonia	0.89	1.02	0.74	0.75	0.37
	Rates per 1,000 Total Births (Live and Still) :—				
Notifications :—					
Puerperal Fever	} 8.50	10.35	7.63	{ 1.62	0.00
Puerperal Pyrexia					
				*9.68	

* Including Puerperal Fever.

Diphtheria Immunisation.

Number of Diphtheria Immunisation Clinics held during 1946.			12
Number of children who completed full course of primary immunisation during 1946.	Age at date of final injection		Total
	Under 5 years	5—15 years	
		113	13	126
Total number of children who were given a reinforcing injection during 1946.	Nil.		

Immunisation in Relation to Child Population.

Number of Children who had completed a full course of Immunisation at any time up to 31st December, 1946.								
Age at 31/12/46. i.e. Born in Year.	Under 1 1946	1 1945	2 1944	3 1943	4 1942	5—9 1937—1941	10—14 1932—1936	Total under 15
Number Immunised	—	144	276	256	282	1,026	882	2,866
Estimated mid-year population 1946	1,260					2,320		3,580
Percentage immunised to child population.	76.0%					82.2%		80.1%

Diphtheria Notifications and Deaths in relation to Immunisation

Notifications			Deaths		
Age at Date of Notification	Number of Cases Notified	Number of cases included in preceding column in which the child had completed a full course of immunisation	Age at Date of Death	Number of Deaths	Number of cases included in preceding column in which the child had completed a full course of immunisation
Under 1	—	—	Under 1	—	—
1	—	—	1	—	—
2	—	—	2	—	—
3	—	—	3	—	—
4	—	—	4	—	—
5 to 9	3	1	5 to 9	—	—
10 to 14	—	—	10 to 14	—	—
TOTALS	3	1	TOTALS	—	—

Prevention of Blindness.

No action has been taken by the District Council under Section 176 of the Public Health Act, 1936, for the prevention of blindness or for the treatment of persons suffering from any disease or injury to the eyes.

This work is undertaken in the District by the Cheshire County Council.

Tuberculosis.

No action has been taken during 1946 under the Public Health (Prevention of Tuberculosis) Regulations, 1925, relating to persons suffering from pulmonary tuberculosis employed in the milk trade, or under Section 172 of the Public Health Act, 1936, relating to the compulsory removal to a hospital of persons suffering from tuberculosis.

New Cases and Mortality during 1946.

AGE PERIODS	NEW CASES				DEATHS			
	Pulmonary		Non-pulmonary		Pulmonary		Non-pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	—	—	—	—	—	—	—	—
1—5 years	—	—	—	—	—	—	—	—
5—15 years	—	—	—	—	—	—	—	—
15—25 years	—	—	—	2	—	—	—	—
25—35 years	1	1	—	—	1	1	—	—
35—45 years	3	—	—	1	2	—	—	1
45—55 years	—	—	—	—	—	—	—	—
55—65 years	1	—	—	—	1	—	—	—
65 years and over	1	—	—	—	2	—	—	1
Totals	6	1	—	3	6	1	—	2

Note. (1) One of the Male Pulmonary cases notified is an Ex-serviceman.

(2) Of the total deaths from tuberculosis 44.4% had not been notified.

Tuberculosis.

	PULMONARY			NON-PULMONARY			Pulmonary and Non-Pulmonary TOTAL
	Males	Females	Total	Males	Females	Total	
Number of cases of Tuberculosis on the Register at the beginning of 1946	46	31	77	23	19	42	119
Number of cases notified under the Regulations for the first time during 1946	3	1	4	—	3	3	7
Number of cases removed from the Register during a preceding year which have been restored to the Register during the year	—	—	—	—	—	—	—
Number of cases added to the Register during the year which have been brought to notice otherwise than by Notification under the Regulations	3	2	5	—	—	—	5
Number of cases removed from the Register during the year	17	5	22	3	9	12	34
Number of cases remaining on the Register at 31st December, 1946	35	29	64	20	13	33	97

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